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The effects of a high risk environment on the sexual victimization of homeless and runaway youth

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The effects of a high risk environment
on the sexual victimization of homeless and runaway youth

by

Kimberly Ann Tyler

A dissertation submitted to the graduate faculty
in partial fulfillment of the requirements for the degree of
DOCTOR OF PHILOSOPHY

Major: Sociology

Major Professor: Dan R. Hoyt

Iowa State University

Ames, Iowa

1999

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ABSTRACT

This study examines the effects of a high-risk environment on the sexual victimization of 311 homeless and runaway youth. Based on the structural-choice theory of victimization, it was hypothesized that the daily routines and lifestyles of these young people would enhance contact between potential offenders and potential victims. It was also expected that the subjective utility of potential targets would determine whether they would potentially become victims. Taken together, these two propositions are expected to determine who is most likely to be at risk for sexual victimization. Three sets of logistic regression models were run using three different dependent variables. Results from the first set of models revealed that survival sex, age, gender, and grooming, were all significantly associated with total sexual victimization. Findings from the second set of models indicated that the amount of time youths spent sleeping on the street, the age at which they first ran away, participating in survival sex, and gender, were significantly related to stranger sexual victimization. Finally, deviant subsistence strategies, survival sex, gender, and grooming, were all related to being a victim of friend sexual victimization. The results from a series of interactions also revealed that the effects of deviant behaviors on sexual victimization varied by gender and age but only for total sexual victimization and friend sexual victimization. The findings from the current study provide support for the structural-choice theory of victimization. Due to the difficulties of survival in a hostile and exploitative street environment, the lifestyles and daily routines of homeless and runaway youth may put them at increased risk. However, their likelihood of becoming victims depends upon the motives of the offender. Those who have characteristics that are congruent with the sexual offender's needs are more likely to experience sexual victimization. This suggests that it is the

interaction of both structural components and choice components that determine who will become a victim of sexual assault.

CHAPTER I

INTRODUCTION

This study is concerned with the sexual victimization of homeless and runaway youth. Many runaways have suffered from early childhood sexual abuse. The effects of such abuse has been found to be associated with numerous negative developmental outcomes including depression, substance abuse, inappropriate sexual behavior, and involvement in prostitution and deviant subsistence strategies. These negative developmental outcomes in turn have been found to be associated with later sexual victimization. Research consistently demonstrates indirect effects of early childhood sexual abuse on later sexual victimization through these negative developmental experiences. Ironically, adolescents who leave dysfunctional and disorganized families to escape abuse often experience similar types of victimization while out on the streets.

The structural-choice theory of victimization (Miethe & Meier, 1990) is useful for examining factors that may be associated with the increased risk of victimization. This theory takes into account the context-specific effects of daily street life. This theory also includes a consideration of the process of target selection whereby these young people are selected as potential victims by motivated offenders. The combination of the social environment and the motives of the offender create an opportunity structure of crime which results in an increased risk for sexual victimization among homeless and runaway adolescents.

Chapter II reviews the existing literature on the effects of early childhood sexual abuse on later sexual victimization and how each of these are related to runaway and homeless behaviors. Rates of childhood abuse among runaways and non-runaways are discussed. The long-and short-term consequences of the negative developmental outcomes of

early sexual abuse also are examined along with reasons for why adolescents run away. The life histories of abused adolescents are examined using a risk amplification model (Whitbeck, Hoyt, & Ackley, in press) which is helpful for explaining how these young people arrive on the streets in the first place. The final portion of this chapter focuses on street life among sexually abused adolescents.

The focus of Chapter III is on victimization theories. A total of three victimization theories are examined. Such theories, which focus on the social context in which crime occurs, are useful for explaining the social environment in which runaway adolescents routinely interact. Lifestyle-exposure theory (Hindelang, Gottfredson, & Garofalo, 1978) and routine activity theory (Cohen & Felson, 1979) argue that the lifestyles and daily routines of people's everyday lives are related to differential exposure to dangerous places and people, which creates the potential for crime opportunities and therefore for increased victimization. Structural-choice theory of victimization (Miethe & Meier, 1990), which is a combination of lifestyle-exposure theory and routine activity theory, gives a more complete understanding of the target selection process as well as examining the context-specific effects of lifestyles and daily routines on the risk for victimization. A set of hypotheses are proposed to test the usefulness of such theories in explaining sexual victimization among runaway adolescents.

Chapter IV provides a description of the study design and methods. The data collection procedures, including eligibility requirements and informed consent, are described. Demographic information on the sample is provided along with reasons for running and place of residence in the past week. The following section describes how each variable is measured. A list of all the questions that were used in computing each item are included as well as the coding that was utilized. Results from factor analyses also are reported along with

the reliability scores for composite measures. Finally, the procedure that is employed for generating all of the models is discussed.

The results of this study are presented in Chapter V. Initial distribution and bivariate associations are reviewed followed by the results from multivariate analyses. The results from the multivariate analyses are presented in three sections corresponding to the three outcome variables that were considered. The first outcome variable examined is sexual victimization. Then, in order to better examine selected hypotheses, victimization is divided into victimization by strangers or victimization by friends. A comparison of nested models is presented for each set of analyses to test whether there is an improvement in model fit. Finally, significant interaction terms also are discussed.

Chapter VI provides a summary of the findings and a discussion of how they relate to previous research. The usefulness of victimization theories in explaining the likelihood of sexual victimization among homeless adolescents is discussed. Limitations of the study are presented and the implications and direction for future research are described.

CHAPTER II

WHAT WE KNOW ABOUT EARLY SEXUAL ABUSE AND ITS EFFECTS ON LATER SEXUAL VICTIMIZATION

Introduction

Research conducted on runaways reveals that many of these adolescents have suffered from early childhood sexual abuse (Janus, McCormack, Burgess, & Hartman, 1987). Although females are more likely to be at risk compared to males, both genders are likely to be victims and both suffer from negative developmental consequences. The literature review presented in this chapter will show that the backgrounds of these young people is characterized by a family history marked by disorganization and high levels of sexual and/or physical abuse. As a result of such backgrounds, these adolescents continue on their negative developmental trajectories as they enter the streets. Here, adolescents are exposed to a social environment where drug use and deviant subsistence strategies are a part of everyday life. Living on the streets results in adolescents being highly visible and accessible. Street life also puts them in close proximity to potential offenders, which further increases their likelihood of being a victim of sexual assault.

Rates of Early Childhood Sexual Abuse

Although there are no reliable statistics on how many cases of childhood sexual abuse that actually occur each year, it is estimated that one in four girls and one in ten boys will suffer from victimization (Finkelhor, 1993). The risk for sexual abuse rises in pre-adolescence and girls are more likely to be at higher risk than boys. Statistics on childhood sexual abuse exist only for those cases that are reported to child protection agencies or law

enforcement offices. According to Finkelhor (1994), the actual number of cases reported to child abuse authorities is 2.4 cases per 1,000.

Although only 15% of child sexual abuse cases have been substantiated (Finkelhor, 1994), the actual number of cases is expected to be much higher since sexual abuse is underreported by both male and female children (Becker, 1988). Retrospective reports of childhood sexual abuse range anywhere from 20% (Fleming, Mullen, & Bammer, 1997) to a high of 60% (Peters, 1988). Estimated rates also may tend to vary, in part, due to differences in samples. For example, in their study of 586 female undergraduates, Alexander and Lupfer (1987) found the rate of sexual abuse to be 25%, whereas Russell's (1983) study of 930 adult women living in a community found the rates of sexual abuse prior to the age of 18 to be closer to 38%.

Studies done on adolescents and youths report a range of percentages similar to those found in adult retrospective reports. Bayatpour, Wells, and Holford (1992) reported that almost 12% of teens they surveyed had been sexually abused, whereas Finkelhor and Dziuba-Leatherman (1994) found twice this rate in their study of 10-16-year-olds. Dembo and colleagues (1989) found a sexual victimization rate of 35% in their sample of adolescents. Finally, Kellogg and Hoffman (1997) found much higher rates of sexual victimization among females (54%) compared to males (15%). Although the estimated rates vary across studies, the clear pattern is for high rates of abuse whether using retrospective reports or youth samples.

Studies find even higher rates of abuse among homeless and runaway youth. In a study of physical and sexual abuse among 78 runaway youths admitted to a shelter, Warren, Gary, and Moorhead (1994) found that 15% of the adolescents had been sexually abused,

30% had experienced physical abuse, and 18% had experienced physical, sexual, and emotional abuse. Weisberg (1985) also found sexual abuse to be a common characteristic in the backgrounds of adolescent male prostitutes, where the rate of sexual abuse by a family member was reported to be 29%. McCormack, Burgess, and Gaccione (1986a) note that 44% of the adolescents they interviewed reported being sexually abused. Other studies have reported that more than 50% of the adolescents they interviewed have experienced childhood sexual abuse (Janus et al., 1987; Silbert & Pines, 1981). Moreover, gender differences revealed that females experienced much higher rates of sexual abuse compared to their male counterparts (McCormack, Janus, & Burgess, 1986b; Whitbeck & Simons, 1990).

The Effects of Early Sexual Abuse

Negative developmental outcomes have been reported for adolescents with a history of sexual abuse. Depression (Beitchman, Zucker, Hood, da Costa, & Akman, 1991; Garnefski & Arends, 1998; Stiffman, 1989; Whitbeck et al., in press), poor self-esteem (Morrow & Sorell, 1989; Oates, Forrest, & Peacock, 1985), substance abuse (Dembo et al., 1989), inappropriate sexual behavior (Beitchman et al., 1991; Browne & Finkelhor, 1986), suicidal ideation/behavior (Chandy, Blum, & Resnick, 1996; McCormack et al., 1986b), running away (Farber, Kinast, McCoard, & Falkner, 1984; Weisberg, 1985), and involvement in prostitution and deviant subsistence strategies (Janus et al., 1987; Silbert & Pines, 1981; Simons & Whitbeck, 1991; Widom & Kuhns, 1996) are just some of the effects that have been noted.

The negative developmental outcomes that adolescents experience as a result of early childhood sexual abuse include both short-and long-term consequences. The short-term effects of childhood sexual abuse tend to differ by age. Beitchman and colleagues (1991)

reported that preschoolers who have experienced sexual abuse were more likely to have precocious sexual knowledge and to display seductive behavior. School-age children with a history of sexual abuse were found to display behavioral and academic problems at school. For adolescents, sexual abuse was associated with depression, low self-esteem, and suicidal behavior/ideation. Other commonly reported behaviors among sexually abused adolescents included running away, substance abuse, and promiscuity. Beitchman and associates also note that the psychological impact of abuse is greater when the child knows the perpetrator or when more than one perpetrator is present. The use of physical force was also associated with the victim experiencing greater trauma. In addition to those short-term effects listed above, fear, anger, hostility, and inappropriate sexual behavior also have been noted as other possible short-term effects (Browne & Finkelhor, 1986). Long-term effects of childhood sexual abuse include promiscuity, depression, difficulty trusting others, self-destructive behavior, and re-victimization (Beitchman et al., 1992; Browne & Finkelhor, 1986).

Reasons for Running

Considering the high rates of sexual abuse that many runaway adolescents have experienced (cf. Janus et al., 1987), it should be no surprise that many of them run as a result of the abuse. As indicated by Janus and associates (1987), "...these youths are running from something, not running to something" (p. 17). In fact, studies have found that adolescents often list physical and sexual abuse as important reasons for running away. In their study of 84 youth in Iowa, Whitbeck and Simons (1990) found that 24% of runaway adolescents listed sexual abuse as an important reason for leaving home, whereas 43% indicated physical abuse. Breaking the sample down by gender revealed that 11% of males and 36% of females noted sexual abuse as a reason for leaving.

Homeless and runaway adolescents often come from abusive family backgrounds. Although physical and sexual abuse are not the only reasons for leaving, research shows that a history of sexual abuse is important for predicting why females leave home. Specifically, studies have found that more than one third of females run away as a result of sexual abuse (Terrell, 1997; Whitbeck & Simons, 1990).

Overview

Research conducted on the effects of early sexual abuse tends to be in agreement on several issues. The first is that there are no reliable statistics on the number of cases of childhood abuse yet we know that girls are at greater risk than boys and that homeless adolescents experience rates of abuse that exceed all other groups. The second point of agreement is that there are negative developmental outcomes that are associated with early abuse and many of these effects tend to be long lasting. Finally, research also has demonstrated that family abuse is a major reason for these adolescents leaving home.

Once these young people reach the streets, they are likely to encounter an exploitative and hostile environment; one that will require them to engage in risky, deviant subsistence strategies in order to survive (Whitbeck et al., in press). The fact that these young people are desperate enough to engage in dangerous activities rather than returning home is a good indication of how dysfunctional and disorganized home life is for them. Before examining which characteristics of the high-risk environment predict sexual victimization among homeless adolescents however, it is important to understand their backgrounds. The fact that many of these runaways have been sexually and/or physically abused is one of the main reasons that they are out on the street in the first place. Understanding the life histories of

these adolescents puts in perspective why they are out on the streets and why they engage in the particular lifestyles and daily routines that they do.

Risk Amplification Model

The risk amplification model, developed by Whitbeck and colleagues (Whitbeck et al., in press), is a way of understanding this early process. This model, which applies elements of life course developmental theory (Elder, 1997) and social interaction theory (Patterson, 1982) to the study of homeless and runaway youth, suggests that adolescents who leave dysfunctional and disorganized homes continue on negative developmental trajectories. Once these adolescents reach the streets, they become affiliated with deviant peers, which leads to their involvement in risky, deviant behaviors, resulting in their later victimization.

Patterson has argued that coercive families provide “basic training” for antisocial behaviors (Patterson, Dishion, & Bank, 1984). This first, or basic, training is the result of continuous failure on the part of the parents to use effective discipline techniques in controlling coercive exchanges between family members. Through this training, the child learns to control other members of the family by means of coercion, and these interaction styles are generalized into other contexts. These coercive and abusive behaviors learned from family interactions become coping styles that are carried with the adolescent into peer interactions, which results in rejection by normal friend groups (Patterson et al., 1984; Patterson, DeBaryshe, & Ramsey, 1989). As adolescents leave or are thrown out of their dysfunctional families, interaction patterns learned at home are carried into early independence. The “basic training” for antisocial behavior in the family now becomes “advanced training” on the streets (Whitbeck et al., in press). The combination of antisocial behavior and rejection by conventional peers leads adolescents to form ties with deviant peer

groups that are important for explaining adolescents' subsequent involvement in risky, deviant behaviors (Whitbeck et al., in press).

Many adolescents from dysfunctional families have been victimized sexually and/or physically. In addition to this abuse, they also sustain psychological harm. Consequently, when they arrive on the streets their expectations are such that others are also hostile and exploitive (Dodge, 1986) and they may behave in ways that elicit negative and/or aggressive responses from others, thereby supporting their initial distrust (Caspi, Bem, & Elder, 1989). Maladaptive behaviors and negative self-concepts "are sustained across the life course by the progressive accumulation of their own consequences" (Caspi et al., 1989, p. 377). Survival on the streets often calls for the use of maladaptive behaviors that elicit negative responses from others. The social context within which adolescents interact reflects their self-concept. This progressive accumulation of interactional styles and outcomes serves to solidify and amplify existing negative developmental effects (Whitbeck et al., in press).

In summary, risk amplification is a way of understanding the life histories of homeless adolescents. It explains how the early abuse is responsible for these young people being on the streets and the types of coercive and aggressive behaviors that they are likely to display once they are out there. Knowing the life histories of these adolescents makes it easier to understand the choices that many of them have to make while out on the streets. When resources are few and choices are extremely limited, the social context of street life can be overwhelming and the end result for many of these homeless adolescents is often victimization as revealed in the following section.

Sexually Abused Adolescents on the Streets

Sexually abused adolescents who spend more time out on the streets are likely to be at greater risk for victimization (Janus et al., 1987; Whitbeck & Simons, 1990). The age at which adolescents first run, the number of times they run, and the amount of time they spend on the street, have all been found to increase the likelihood of being sexually victimized.

The age at which adolescents first leave home is a crucial factor in determining the amount of risk and exposure that they will experience. Childhood sexual abuse typically occurs between eight and twelve years of age (Finkelhor, 1984); therefore, children who have been abused sexually may be more likely to run at earlier ages. The younger the age at which adolescents run, the more time they will spend on the street which means a longer time period for being at risk for victimization.

The number of times that adolescents run away from home has also been found to be associated with victimization. In their study of 84 runaway adolescents, Whitbeck and Simons (1990) found that adolescents from abusive families tended to run more frequently. This finding was supported for both males and females. The number of times that adolescents have run away was positively associated with victimization among girls but not for boys. Adolescent girls tended to be more at risk for victimization the more often they left home (Whitbeck & Simons, 1990).

Janus and associates (1987) studied the effects of running away from home on 149 adolescents. They found that the number of times the adolescents had run away varied considerably, from 1 to 110 episodes. Forty-six percent of adolescents had left home more than three times, while the mean number of times run was 8.9. They also noted that some adolescents left home for the first time as early as four years of age. The authors found that

the more time runaways spent on their own, the more likely they were to report trouble with the law as well as being arrested. Many of these adolescents are chronic runaways, particularly for those who run from abusive homes. Those who have been on their own for a period of over one year were more likely to report being offered money to engage in sex acts compared to those adolescents who had been away from home for shorter periods. Janus and colleagues (1987) conclude that runaway adolescents often are victims of troubled as well as abusive family environments. Running away exposes the youth to further dangers of the streets, where survival becomes their first priority.

The amount of time that adolescents spend on the street is related to engaging in dangerous activities and the risk of being victimized. For example, in a study of 489 runaway and homeless youth, Kufeldt and Nimmo (1987) identified two distinct groups that emerged in their sample: "runners" and "in and outers." "Runners" refers to adolescents who leave home with no intention of returning, whereas "in and outers" are more likely to use running as a temporary coping mechanism. A comparison of these two groups revealed that those who had experienced physical or sexual abuse were more likely to be runners, with no intentions of returning. A history of family abuse was associated with spending more time on the streets. Further, Kufeldt and Nimmo found that runners were more likely to be pulled into illegal activities on the street. In summary, the more time that youths spend on the street, the greater the likelihood of engaging in dangerous activities which increase risk for victimization.

In another study of 255 homeless and runaway adolescents, Whitbeck and associates found that physical abuse and sexual abuse were significantly associated with street time (Whitbeck et al., in press). This association, which was found to be significant for both boys

and girls, indicates that adolescents with a history of abuse were more likely to spend an increased amount of time out on their own compared to their non-abused counterparts. Furthermore, it was found that street time was positively associated with victimization for males indicating that the more time that adolescent boys spent on their own, the more likely they were to have reported having been victimized.

Being out on the streets, regardless of what one is doing, increases one's visibility and accessibility to crime in addition to increasing the likelihood of contact between oneself and potential offenders (Miethe & Meier, 1994). Add to this the fact that many homeless adolescents use hard drugs (Koopman, Rosario, & Rotheram-Borus, 1994) and engage in survival sex (Weisberg, 1985) and other deviant subsistence strategies (Whitbeck, Hoyt, & Ackley, 1997), and the end result is an increase in risk for sexual victimization. Moreover, since personal victimization has been found to be associated with the amount of time spent in public places, especially at night (Hindelang et al., 1978), runaways are at further risk since much of their time is spent out on the streets.

Adolescents from abusive family backgrounds are not only more likely to be multiple runners and to spend more time on the streets, but youths from such backgrounds also are more likely to become associated with deviant peer groups and to engage in deviant subsistence strategies once leaving home (Whitbeck & Simons, 1990, 1993). The work of Patterson and colleagues (Patterson et al., 1984; Patterson et al., 1989) reveals that many adolescents from coercive and abusive family backgrounds learn antisocial behaviors, which results in rejection by normal peer groups, thereby increasing deviant peer group affiliation. Associating with non-conventional peer groups increases the adolescents' chances of

engaging in deviant, risky subsistence strategies (Whitbeck et al., in press) and such behaviors further increase risk for victimization (Lauritsen, Sampson, & Laub, 1991).

In a study of 84 homeless and runaway adolescents, Whitbeck and Simons (1990) found that for young women, a history of family abuse was positively associated with number of times having run as well as affiliation with deviant friends. Associating with deviant peers was found to lead to participation in deviant subsistence strategies (e.g., selling drugs, shoplifting), which in turn increased their chances of victimization. The number of times these young females ran also increased involvement in deviant subsistence strategies, which led to increases in victimization. The results were similar for young men, with two exceptions. First, they found that being from an abusive family was positively associated with participating in deviant subsistence strategies among adolescent boys. Second, in contrast to the findings for the females, association with deviant peers had a direct positive association with victimization for the males (Whitbeck & Simons, 1990).

In a related study, the effects of early sexual abuse on later street victimization were compared for 156 homeless adolescents and 319 homeless adults (Whitbeck & Simons, 1993). Runaway adolescents were more likely to come from abusive backgrounds, to participate in deviant subsistence strategies, and to be victimized on the streets compared to homeless adults. Regardless of age, women were at greater risk for sexual assault than were men. Adolescent females reported the highest rates of sexual assault. For homeless adolescent males, a history of sexual abuse had both direct and indirect effects on victimization through antisocial behaviors and deviant subsistence strategies. For adolescent homeless females, neither early abuse nor antisocial behavior contributed directly to victimization. Instead, a history of abuse was associated with participating in deviant

subsistence strategies, which increased risk for victimization. The authors summarize by pointing out that adolescents are likely to be at greater risk for criminal victimization compared to adults. Homeless adolescents have fewer options for self-support, which means they are more likely to participate in deviant subsistence strategies for money. Because such strategies are highly related to victimization, homeless adolescents are likely to continue to be at risk (Whitbeck & Simons, 1993).

Other studies of runaway youth also have found a connection between early abuse and delinquent activities. For example, McCormack and associates (1986b) found that females who were sexually abused were more likely to engage in delinquent activities compared to their non-abused counterparts. The authors suggest that sexually abused females are more likely to engage in delinquent activities such as substance use, petty theft, and prostitution. These types of delinquent activities are likely to increase the risk for sexual victimization.

Interestingly, in a study of 79 homeless adults, Simons and colleagues (1989) also found support for an association between involvement in deviant subsistence strategies and victimization. Their results indicated that having a history of psychiatric treatment, substance abuse, and employment problems led to a lifestyle based on desperate survival behaviors. The more often that homeless adults engaged in such deviant subsistence strategies, the more likely they were to experience criminal victimization (Simons, Whitbeck, & Bales, 1989).

Hagan and McCarthy's (1997) research on the criminal experiences of runaway youths also focuses on the connection between deviant peers and deviant subsistence strategies. They found that being out on the streets without food or money increased the likelihood of these adolescents engaging in some type of criminal activity. For some of these

youths, offending was their only source of income, and when the situation became desperate, deviant subsistence strategies prevailed. Serious crime tended to increase when runaways were hungry. Serious theft and prostitution were likely to increase when trying to find shelter. The knowledge and skills needed for survival on the streets often promoted criminal activity. Living on the streets lead to an affiliation with criminal street networks where recent runaways were exposed to mentors and tutors who transmitted the skills necessary for criminal activity (Hagan & McCarthy, 1997). This association with deviant peers lead to their involvement in criminal activity, thereby increasing their exposure to offenders, which resulted in an increased risk for victimization.

Lauritsen and associates (Lauritsen et al., 1991) also examined the connection between involvement in criminal activity and victimization among adolescents. Results from a longitudinal study of 1,725 youths in the National Youth Survey indicated that adolescents who were involved in delinquent lifestyles were more likely to be at risk for both personal victimization and property victimization. Furthermore, adolescents involved in deviant activities were almost four times more likely to be assaulted compared to non-delinquents.

Another activity that has been found to be associated with early sexual abuse and later sexual victimization is the use of hard drugs. Dembo and associates' (1989) study of high-risk male and female youths revealed that a history of abuse had a direct effect on illicit drug use. Family abuse also had an indirect effect on drug use through self-derogation. A history of sexual abuse also has been found to be associated with multiple substance use as well as with initiating use earlier (Harrison, Fulkerson, & Beebe, 1997).

Not only is drug use related to early family abuse, it has also been found to be associated with sexual victimization. The use of drugs often puts people in vulnerable

situations where their ability to refuse or ward off unwanted advances is diminished by their incapacitated state. Furthermore, runaways tend to hang out on the streets where they are exposed to a variety of people, many of whom may be potential victimizers. The social environment in which these adolescents live, combined with the fact that many runaways have high rates of drug use (Koopman et al., 1994; Weisberg, 1985) increases their chances for sexual victimization.

Substance use also has been responsible for introducing some adolescents to a life of prostitution, which further increases risk of victimization. Prostitution may be seen as a quick and easy way to make money to support a drug habit. The use of drugs is quite common while engaging in prostitution because these substances help adolescents deal with the loneliness that they experience as a result of the casualness of their sexual encounters (Weisberg, 1985). However, using drugs while engaging in prostitution may put these adolescents further at risk for victimization because being “high” places them in a situation in which their customers easily may take advantage of them.

Engaging in survival sex is another activity that increases the adolescents’ risk for sexual victimization. Many runaways become involved in trading sex as a last resort; they are hungry and need money (Silbert & Pines, 1982; Weisberg, 1985). Being out on the streets and recruiting potential customers results in these adolescents being highly visible. Trading sex puts homeless young people in dangerous and vulnerable situations with little or no protection from violent customers and others who may try to exploit them. Engaging in such an activity heightens the likelihood of being victimized sexually.

Bagley and Young’s (1987) study of 45 former prostitutes over the age of 17 indicates a process whereby a history of sexual abuse leads to involvement in high-risk

sexual behaviors which then leads to an increase in the risk for sexual victimization. Bagley and Young found that those with a history of sexual abuse initiated sexual intercourse at an early age and that more than half of these women reported having had intercourse with four or more males before entering prostitution in their teen years. Over 50% of their sample reported that the early abuse resulted in negative feelings about sex and half of the sample indicated that the abuse was a significant factor in becoming a prostitute. The majority of the sample entered prostitution before 16 years of age. However, before entering prostitution, 90% of these females had been sexually abused and/or raped (Bagley & Young, 1987). The women in this study appeared to be at risk for sexual assault prior to prostitution because of the sexual abuse they experienced in their family of origin. A history of abuse resulted in the early initiation of sexual activity with numerous sexual partners, which most likely increased a woman's risk for victimization. Moreover, involvement in prostitution or trading sex further heightened the probability of being sexually assaulted on the streets.

In their study of 200 juvenile and adult current and former female prostitutes, Silbert and Pines (1981) found that 60% of respondents were abused sexually as juveniles. The majority of women (70%) also reported that the early sexual abuse affected their eventual entrance into prostitution. Almost all of the juveniles (96%) in the study were runaways. When asked why they started prostituting, 89% of the juveniles said they needed the money and were hungry. For many, prostitution was the only way to survive. Adolescents who are hungry and need a place to stay may be forced into selling themselves to survive. Engaging in prostitution for survival purposes may mean participating in risky sexual behaviors with dangerous customers from whom they are likely to experience high levels of victimization.

Based on a sample of 40 runaway adolescents and 95 homeless women, Simons and Whitbeck (1991) found that those with a history of early childhood sexual abuse were more likely to become involved in risky and dangerous lifestyles once out on the streets. Participation in such dangerous activities, along with aggressive characters, increased the likelihood of being victimized (Simons & Whitbeck, 1991).

Other factors that have been found to be associated with sexual victimization include gender and age. As noted previously, girls are more likely to be at risk for sexual abuse compared to boys and that the risk for abuse rises in pre-adolescence (Finkelhor, 1993). Among runaway adolescents, research also finds that girls continue to be at higher risk. That is, females are likely to be victimized sexually at a higher rate compared to their male counterparts (Whitbeck & Simons, 1990; Whitbeck et al., 1997).

Weisberg's (1985) work, which compares runaway male and female adolescent prostitutes, also reveals gender differences. Her work demonstrates that even though males and females may experience physical and/or sexual victimization at the hands of their customers, females are likely to suffer double jeopardy because they are also likely to be abused by their pimp. Males in contrast do not have pimps and therefore suffer less victimization.

Other research has found age and gender differences when predicting personal victimization. Using data from a national youth survey, Finkelhor and Asdigian (1996) found that female gender was the most powerful predictor of sexual assault. Age also was found to be an important correlate of sexual assault: those who were older were more likely to be at risk.

Although not youth-specific, other studies focusing on personal victimization also note the importance of age and gender. For example, Kennedy and Forde's (1990) study of over 6,000 respondents ages 16 and over found that younger persons and males were more likely to be the victims of assault. Other studies which focus on personal victimization find similar results (Miethe, Stafford, & Long, 1987; Sampson & Lauritsen, 1990). Inconsistency in the findings for gender and age may be explained by variation in the outcome variables and the age groups considered. Finkelhor and Asdigian's (1996) study focused on sexual assault using a group of adolescents ages 10-16 while many of the latter studies focused on assault with older age groups.

Deviant peers is another factor that has been found to be associated with sexual victimization. The work of Whitbeck and colleagues (1997) looks at the initial process where youth who run from abusive family backgrounds become involved in street life, and, thus, increase their chances of victimization. Based on an analysis of the first 108 interviews from an ongoing study of runaway adolescents, the effects of family abuse on both physical and sexual victimization were examined. Results for the sexual victimization model indicated that family abuse was associated with affiliating with deviant peers and deviant peers was found to influence sexual victimization positively. The results also indicated that girls were more likely to experience sexual victimization compared to boys and that girls were put at risk mostly through their association with deviant peer groups. Also, the risk for sexual victimization among homeless female adolescents appeared to be immediate. Results for the physical victimization model indicated that family abuse had a direct effect on physical victimization. However, family abuse also indirectly affected victimization through affiliation with deviant peers, subsequent participation in deviant subsistence strategies, and

finally increasing physical victimization. It appears that involvement in high-risk activities increases both exposure and risk for victimization (Whitbeck et al., 1997).

While research finds that deviant peers have a negative influence on homeless adolescents (Whitbeck et al., 1997), it is also argued that deviant peers play an important role in the protection of runaways (Hagan & McCarthy, 1997). That is, street families, which may consist of deviant peers, are often formed to provide protection and offer social support. Hagan and McCarthy (1997) found that runaways form such “street families” for both pleasure and crisis. For females, safety is one of the most important reasons for joining a group which often consist of deviant peers (Hagen & McCarthy, 1997). Although many of these street “family members” may be engaged in deviant behaviors, it is possible that they still provide protection to the group. As such, even though affiliating with deviant peers may be associated with engaging in deviant subsistence strategies (Whitbeck et al., 1997), such peers can also serve as protectors from strangers by increasing the level of guardianship which is important in preventing victimization from occurring (Cohen, Kluegel, & Land, 1981). Based on this interpretation, deviant peers may be helpful in some regards but detrimental in others.

Summary

Sexually abused adolescents who reach the streets are exposed to an environment that calls instinctive survival skills into play. With few resources available, these adolescents are often forced into engaging in deviant subsistence strategies in order to secure money, food, and a place to stay. Even though life for these young people may appear bleak to the outsider, street life pales in comparison to some of the homes that these adolescents have fled. Even though these young people may be “getting by” on the streets, they still face the danger of

being sexually victimized in this high-risk environment. The following chapter outlines victimization theories which are helpful in describing the social environment in which these adolescents exist as well as explaining how potential victims and potential offenders come together to create an opportunity structure of crime which is related to increased victimization.

CHAPTER III

VICTIMIZATION THEORIES

Introduction

Victimization theories (cf. Cohen & Felson, 1979; Hindelang et al., 1978; Miethe & Meier, 1990), which focus on the social context in which crime occurs, may be useful for examining the impact of the social environment in which runaway adolescents routinely interact. Specifically, lifestyle-exposure theory (Hindelang et al., 1978) and routine activity theory (Cohen & Felson, 1979) argue that the lifestyles and daily routines of people's everyday lives are related to differential exposure to dangerous places and people, which creates the potential for crime opportunities and therefore for increased victimization. Structural-choice theory of victimization (Miethe & Meier, 1990), a combination of lifestyle-exposure theory and routine activity theory, gives a more complete explanation of the risk for victimization because it examines the context-specific effects of lifestyles and daily routines as well as the target selection process. Each of these victimization theories are examined below.

Lifestyle-Exposure Theory

Lifestyle-exposure theory was developed originally by Hindelang and associates (1978) to account for differences in victimization rates across social groups. That is, research consistently found that certain groups in society, such as males, young adults, and racial minorities, experienced higher rates of victimization compared to other groups. As such, lifestyle-exposure theory was committed to understanding the relationship between people's social and demographic characteristics and their risk of victimization.

The basic idea underlying lifestyle-exposure theory is that the likelihood of risk of victimization is explained by variations in lifestyles. Differences in lifestyle are important because they are related to differential exposure to dangerous places and people that is associated with a high risk of victimization. The important factor that determines risk of victimization is an individual's lifestyle. Lifestyle, according to Hindelang and colleagues (1978), is defined as "routine daily activities, both vocational activities (work, school, keeping house, etc.) and leisure activities" (p. 241). According to their model, both ascribed and achieved characteristics (e.g., age, sex, race, income, marital status, education, occupation) are important for determining levels of victimization because such characteristics are associated with particular role expectations, structural constraints, (e.g., economic, familial, educational, legal), and adaptations. Adherence to these expectations leads to the establishment of particular types of lifestyles with others of similar character. These lifestyles and associations are expected to magnify one's exposure to vulnerable situations, thereby increasing a person's chances of victimization (Miethe & Meier, 1994).

The basic logic underlying lifestyle-exposure theory can be demonstrated here with the use of two examples. Despite the push for gender equality in the United States, major differences remain in role expectations and structural opportunities for men and women. For example, females spend a greater proportion of their time indoors and are supervised more closely compared to males. As adults, women are more likely to be the ones to assume housekeeping responsibilities and to engage in childcare. The greater familial responsibility that many women have, in combination with reduced economic opportunities, results in their spending more time in the home as opposed to the public sphere, thus decreasing their exposure to high-risk persons and places as well as decreasing their chances of criminal

victimization. Men, in contrast, traditionally have been socialized to participate in the public sphere, thus spending more time away from a protective home environment. In summary, gender differences in traditional lifestyles are seen as explaining the higher victimization rates of men (Hindelang et al., 1978; Miethe & Meier, 1994).

Income is another strong determinant of lifestyle that is likely to affect exposure to victimization. Those who are disadvantaged economically are likely to have little choice when it comes to housing, transportation, and leisure activities. Lower-income persons are likely to live in high-crime areas, to be in close proximity to offenders, and to have little choice when it comes to engaging in safe leisure activities. In contrast, those with higher incomes are likely to have more choices when it comes to deciding where to live and thus more easily can avoid risky and vulnerable situations. Income, then, is a lifestyle characteristic associated with differential risk for victimization (Hindelang et al., 1978; Miethe & Meier, 1994).

In summary, according to lifestyle-exposure theory, differential risk for victimization by demographic differences such as gender and income are attributed to differences in lifestyle that affect a person's exposure to risky and vulnerable situations. The fact that victimization risks are not distributed consistently across time and space means that individual lifestyles affect the probability of victimization because different lifestyles are associated with differential risks (Miethe & Meier, 1994).

Routine Activity Theory

Routine activity theory, put forth by Cohen and Felson in 1979, was developed to explain the rising crime rate in the 1960s. This theory holds that three minimal characteristics must come together in time and space for crimes to occur. The first is that there must be a

motivated offender who is able to commit the crime. Cohen and Felson do not try and explain the motivated offender, but rather take that as a given. The second element is that there must be a suitable target, either a person or an object, toward which the offender acts. In other words, there must be a building to vandalize, a home to break into, or a person to assault. Finally, an absence of capable guardianship, which means anybody or anything that might prevent a crime from occurring, is also required. Accordingly, crime occurs when motivated offenders encounter suitable targets with low guardianship. It should also be noted that the absence of any one of these three elements reduces the likelihood that a crime will occur (Kennedy & Sacco, 1998).

The basic idea underlying this approach is that various social changes have increased criminal opportunities. Cohen and Felson argue that since World War II, society has experienced a dramatic shift in routine activities away from home. Routine activities are defined as, "any recurrent and prevalent activities which provide for basic population and individual needs, whatever their biological or cultural origins" (p. 593). The movement of leisure activities away from the home to the public sphere has increased the supply of attractive crime targets and decreased the level of guardianship, thereby increasing criminal opportunities (Cohen & Felson, 1979).

The shift in routine activities was accelerated by events such as women's entry into the paid labor force, women's return to college, and rising divorce rates. People's activities also shifted from the household to the public sphere. In addition, changes in patterns of industrial production also have led to an increase in the number of people buying cars and television sets (Kennedy & Sacco, 1998). The increase of valuable possessions within persons' homes, along with the revolution in the design of lightweight durable goods (e.g.,

portable compact disc players and laptop computers) has increased the likelihood of victimization on two accounts. First, an increase in expensive possessions may increase the likelihood of being burglarized. Second, small, lightweight durable goods are concealed and transported easily, which is seen as attractive by the criminal, thus leading to increases in victimization. All of these changes, according to Cohen and Felson, have had important implications for victimization rates because they have created the conditions for rapid increases in criminal opportunities. Changes in routine activities in the 1950s and 1960s have led to increases in victimization rates (Cohen & Felson, 1979).

In summary, the routine activity approach is a theory of opportunity that does not center on what motivates the offender but rather focuses on the increase in opportunity that makes victimization more likely. Increases in opportunity that are likely to result in victimization are tied closely to the lives that individuals routinely lead (Cohen & Felson, 1979).

Routine activity theory is associated closely with the lifestyle-exposure theory, in that both ignore the sources of criminal motivation and direct attention to how the lifestyles and activities of individuals in their everyday lives creates an opportunity structure for crime. However, there are two major differences between the two approaches according to Miethe & Meier, 1994). The first is the difference in terminology that exists. Second, routine activity theory was developed to explain the change in crime rates over time; lifestyle-exposure theory was designed to account for differential risks for victimization among different social groups.

Although lifestyle-exposure theory and routine activity theory have been the most widely applied perspectives in terms of explaining criminal victimization and risk, Miethe

and Meier (1990) more recently have developed a structural-choice theory of victimization which combines features of both theories. This theory not only examines the context-specific effects of lifestyles and daily routines on the risk for victimization but also takes into account the target selection process.

Structural-Choice Theory

The structural-choice theory (Miethe & Meier, 1990), which incorporates the features of lifestyle-exposure theory and routine activity theory, is based on two propositions which are a combination of the central concepts of proximity, exposure, target attractiveness, and guardianship.

Proximity to crime is defined as the physical distance between the areas where potential offenders are likely to be found and where potential targets of crime are likely to reside (Cohen et al., 1981). It follows that individuals who live in high-crime areas are more likely to have contact with offenders, which increases their risk of victimization.

The second concept, exposure to crime, is characterized by an individual's visibility and accessibility to potential offenders (Cohen et al., 1981). For example, exposure to crime is assumed to be greater for people who spend large amounts of time in public places at night (Hindelang et al., 1978).

The third concept, target attractiveness, refers to persons or objects that are selected by the offender because they are seen as having particular value (Miethe & Meier, 1990). Crime targets also are seen as attractive by the offender when they are smaller and more portable (e.g., electronic goods) and offer less physical resistance against attack (e.g., women and children) (Cohen et al., 1981). In response to the victim blaming connotations of the concept target attractiveness, Finkelhor and Asdigian (1996) argue for what they call target

congruence. That is, a particular target is selected because it is seen as being congruent with the needs of the offender. In other words, targets are selected not on the basis of anything they do but rather because they are seen as having certain characteristics that are considered of value by the offender.

Finally, capable guardianship is the ability of persons or objects to prevent violations from occurring (Cohen et al., 1981). Guardianship includes both social dimensions, such as number of family members, as well as physical dimensions such as burglar alarms. Regardless of its form, guardianship is important because implementing such precautions increases the “costs” for the would-be offender, thus decreasing the opportunity for victimization (Miethe & Meier, 1994).

Miethe and Meier combine these four central concepts of victimization theories into two propositions. The first proposition is that the daily routines and lifestyles of individuals create a structure of criminal opportunity by enhancing contact between potential offenders and potential victims. The second proposition is that the subjective value of the potential target (whether it be a person or an object) and the level of guardianship determine which targets are ultimately selected (Miethe & Meier, 1994). Together, these two propositions suggest that “routine activities may predispose some persons and their property to greater risks, but the selection of a particular victim within a socio-spatial context is determined by the expected utility of one target over another” (Miethe & Meier, 1990, p. 245).

Meithe and Meier (1994) retain the four concepts used in victimization theories but divide them into two groups based on their previous propositions. Proximity and exposure are combined into what they call “structural features” because some people are predisposed

to riskier situations based on their activities. Guardianship and target attractiveness represent the “choice components” because they determine which targets are ultimately chosen.

Structural-choice theory (Miethe & Meier, 1990) is an improvement over previous victimization theories because it does not assume that the lifestyles and activities of individuals lead directly to their victimization, but rather takes into account the motivation of the offender, something that lifestyle-exposure theory and routine activity theory take as a given. Structural-choice theory argues that living in certain environments increases one's proximity and exposure to dangerous situations, but whether or not an individual becomes a victim depends on his/her subjective utility compared to other targets (Miethe & Meier, 1994). In other words, becoming a victim is not just based on a particular lifestyle, but is determined by the particular motives of the offender. The interaction that is expected between the structural features and the choice components is an improvement over previous victimization theories because taking into account the motives of the offender absolves the victim of blame such that the offender has the final say in terms of who will be a victim.

Victimization Theories and Runaways

Although victimization theories were designed originally to explain stereotypical crimes such as stranger assaults and robberies, they also have been applied to the study of youth victimization (Finkelhor & Asdigian, 1996; Hoyt, Ryan, & Cauce, in press). Such theories, which focus on the social context of crime, can be useful for explaining the increased likelihood of victimization among runaways. Plagued by financial troubles such as lack of food and shelter, runaway adolescents often become vulnerable to the dangers of survival in a typically hostile and exploitative environment. Engaging in survival sex and other deviant, risky subsistence strategies often become the only means of survival. Due to

such survival needs, runaways are likely to engage in lifestyles and daily routines that magnify their exposure to vulnerable situations, which increases their chances of victimization. The amount of time that runaways spend out on the streets also increases their proximity to potential criminals. In addition to environmental factors (i.e., exposure and proximity to crime), the characteristics of youths such as their gender, age, and cleanliness also may put them at risk.

According to Finkelhor and Asdigian (1996), certain personal characteristics of individuals may increase their vulnerability to victimization because certain offenders are drawn to certain characteristics in victims. For example, femaleness may be seen as an attribute of the victim that is congruent with the needs and motives of a sexual offender. Such a characteristic increases a young woman's vulnerability to victimization independent of anything she does (Finkelhor & Asdigian, 1996). Finally, due to their lack of a stable residence and the dangers of being out on the street, many runaways often form networks with deviant peers which may serve as a protective factor from stranger victimization. Associating with deviant peers may help to prevent crime from occurring. The concurrence of these four constructs (i.e., proximity to crime, exposure to high-risk situations, target congruence of the potential victim, and low levels of guardianship) increase the likelihood that runaways will become victimized.

Hypotheses

Using structural-choice theory, a number of specific hypotheses tapping each of the four basic constructs are proposed for testing in this study. Homeless adolescents spend a large portion of their time out on the streets therefore are likely to be in close proximity to potential offenders. The more time that runaways spend on the streets, which is determined

by the age at which they first leave home, the number of times they have run from home, and the amount of time they spend sleeping on the streets, the more likely they are to come into contact with potential offenders which increases their risk for victimization. Based on this and the previous literature review, three hypotheses are proposed to test the effectiveness of proximity in predicting sexual victimization.

Hypothesis #1. Adolescents who leave home for the first time at an early age will be more likely to experience sexual victimization compared to those who run at later ages.

Hypothesis #2. Adolescents who run from home numerous times are at greater risk for being victimized sexually compared to those who run away fewer times.

Hypothesis #3. Adolescents who spend more time sleeping out on the streets are at greater risk for sexual victimization compared to those who do not sleep outdoors.

Among homeless adolescents, their exposure can be determined by the types of activities in which they participate. Runaways who engage in deviant subsistence strategies, such as conning, mugging, and selling drugs, are likely to be highly visible and to have high exposure to crime and criminals. Engaging in survival sex makes adolescents accessible to victimization because of the very nature of this behavior and due to the places they frequent. Another exposure item is hard drug use. This activity not only exposes adolescents to criminals and high crime areas but being “high” puts them in vulnerable situations where their ability to say no or ward off unwanted advances is diminished. Following this and the

previous literature review, three hypotheses are generated to test the concept of exposure to crime.

Hypothesis #4. Runaway adolescents who engage in deviant subsistence strategies are more likely to be at risk for sexual victimization compared to those who do not engage in such activities.

Hypothesis #5. Homeless adolescents who have high rates of drug use are expected to experience higher rates of sexual victimization compared to those with lower drug use.

Hypothesis #6. Adolescents who engage in survival sex are more likely to be sexually assaulted compared to those who do not trade sex.

Among runaways, target congruence items include their age, their gender, and their grooming. That is, homeless adolescents may be selected as potential targets if these characteristics are considered of value by the potential offender. Based on the literature review which finds an association between demographic characteristics and assault (cf. Kennedy & Forde, 1990), the following hypotheses are put forth to test the concept of target congruence in predicting sexual victimization.

Hypothesis #7. Females will be more likely to experience sexual victimization compared to males because femaleness is an attribute that is congruent with the needs of sexual offenders.

Hypothesis #8. Older adolescents will experience higher rates of sexual victimization compared to their younger counterparts.

Hypothesis #9. Adolescents who are well-groomed will be more likely to be at risk for sexual victimization compared to those with unkempt physical appearances.

Among homeless adolescents, street families are often formed for both pleasure and crisis. For females, safety is one of the most important reasons for joining a group (Hagen & McCarthy, 1997). Although some of these “family members” may be engaged in deviant behaviors, they can still provide protection to the group. Following this, one hypothesis is proposed to test the effectiveness of deviant peers as a measure of guardianship in preventing outside victimization from occurring.

Hypothesis #10. Adolescents who affiliate with deviant peers are likely to experience lower rates of sexual victimization compared to those with no associations.

Since the literature is mixed on the effects that deviant peers have for runaway adolescents (cf. Hagen & McCarthy, 1997; Whitbeck et al., 1997), two additional hypotheses were added. It is possible that deviant peers protect members of their group from certain types of victimization, such as sexual assaults by a stranger. On the other hand, affiliation with deviant peers may increase the risk for other forms of sexual exploitation and victimization by members of this peer group.

Hypothesis #11. Affiliation with deviant peers is expected to be negatively associated with stranger sexual victimization.

Hypothesis #12. Affiliation with deviant peers is expected to be positively associated with friend sexual victimization.

Overview

Structural-choice theory (Miethe & Meier, 1990) may be particularly helpful in explaining predictors of sexual victimization among homeless and runaway adolescents due to its focus on both the structural components and the target selection process. That is, this theory does not argue solely that the lifestyles and daily routines of runaways lead to their victimization but also considers the motivated offender. In this context, being on the street is just one component of the homeless and runaway adolescent's risk for sexual victimization. In effect, the use of structural-choice theory leads to a consideration of the context, the resources and survival needs that the youth bring to this context, and the motivations of offenders who seek potential victims in this setting. The interaction of both structural components and choice components provides a more complete picture of the victimization process and may prove to be of particular benefit in examining the sexual victimization of homeless and runaway youth.

CHAPTER IV

METHODS

Data Collection

Data are from the Seattle Homeless Youth Project. Young people were interviewed using a systematic sampling strategy that maximized locating homeless and runaway youth in metropolitan Seattle. It is well established that it is not possible to randomly sample homeless populations (Wright, Allen, & Devine, 1995) since unbiased enumeration is not realistic. Rather, a systematic sampling strategy that employed both street intercepts and locale interviewing was used. The locales, which provided homeless youth with services, were contacted to obtain permission to give interviewers access to youth. These agencies included Youth Care's Orion Center, University District Youth Center, Capital Hill Youth Center, Center for Career Alternatives, Lambert House, Graham Street Shelter, and Straley House. Interviewers approached all available youth who passed through or were at the locale and appeared to be between the ages of 13 and 21. Street intercepts were made by approaching youth in the areas of the city known to be frequented by homeless and runaway adolescents. These street intercept interviews were conducted at numerous coffee houses, restaurants, other inside areas such as libraries and cafeterias, the respondent's residence, and outside if weather permitted. In addition to solicitations by the interviewers, youth also were recruited through flyers posted in the local agencies and group informational meetings held at the agencies.

Youth were first administered a brief "eligibility" interview. If deemed to be eligible, the study and procedures were explained and informed consent was obtained from interested youth. Eligible youth were between 13 and 21 years of age, spoke English, and did not, at the

time of the interview, have a stable residence, have a viable home to which they could return, and were not physically in the custody of the state. Unstable residence was further defined and constrained as not living with parents or guardians in the previous week and not having spent more than four nights at home in the past week. Youth staying at foster care or temporarily housed with family were eligible. Also, youth not living in a group home for 45 days or more, or having the potential to stay in a group home for more than 45 days were eligible. If the youth had been on the streets less than one week, parental permission was obtained prior to the interview. Otherwise, the youth were considered emancipated and were allowed to provide sole consent.

Respondents were informed that they could refuse participation, refuse single questions, or stop participating in the interview at any time. If young people agreed to participate and complete consent forms, interviewers took the youth to a quiet, private location to conduct the interview. Due to the length of the questionnaire, the interview was conducted in two parts on separate days. Each section took approximately 1 ½ to 2 hours to complete. The youth were paid \$10 for each section with a \$5 bonus for completing both sections. Thus, they were offered \$25 for the entire completed interview. At the end of the interview, the youth were reminded of the confidentiality of their responses and then asked if separate interviewers could talk with their parents at a later time. For further protection of the youth's confidentiality, a Grant of Confidentiality was obtained and at least a two week interval was allowed between the youth interview and interviews with parents. They were assured that no information, other than the fact that they were contacted and were safe at the time of contact, would be disclosed to their parents. The overall response rate was 95%.

Sample Characteristics

A total of 372 adolescents were interviewed. Just over half 203 (54.6%) were male and 169 (45.4%) were female. The age of these young people at the time of the interview ranged from 12 to 21 years, with a median of 17 years for the total sample. Males were slightly older, with a median age of 17 years, compared to females, with a median age of 16 years. The sample was racially diverse: 53% White, 19% American Indian or Alaskan Native, 18% African-American, 7% Hispanic, and 3% Asian or Pacific Islander.

Reasons for leaving home for the first time were reported by adolescents. Although the rationale for running away varied considerably (results not shown), conflict or fighting at home (53%) and adolescents' freedom (52%) were listed most frequently. Not getting along with family members was listed by 43% of respondents whereas 26% indicated that their parents being too strict was a reason for leaving. Adolescents also left home to escape abuse. That is, almost one-half (49%) reported running away due to violence in the home including physical and sexual abuse. One-third of these young people listed alcohol/drug use in the home as a reason for fleeing whereas 34% said they left because of their own substance use. The family not being able to handle the trouble that adolescents got into was reported by 21% of respondents. Finally, 9% of adolescents said their family was too poor to provide support and 5% indicated that they had been abandoned. Percentages exceed 100% due to multiple reasons for running.

Respondents also were asked to indicate where they slept the night prior to their interview and in the previous week (Table 1). Although over one-quarter (27.6%) of respondents reported sleeping at a shelter or mission in the past night, 21% stated that they

had spent the night on the street which included sleeping under a bridge (14%) or in an abandoned house (7%). Eighteen percent of adolescents indicated that they had stayed with a friend. Approximately 10% of young people spent the night at a foster/group home and only 4% reported staying with relatives the previous night.

When respondents were asked to indicate where they stayed in the past week, the percentages for living on the streets increased dramatically (Table 1). That is, 45% of these

Table 1. Location where adolescents slept last night and in the previous week by gender

	Last night			Previous week ^a		
	Total	Female	Male	Total	Female	Male
Relatives	4.3	4.2	4.5	5.9	5.4	6.4
Friends (no rent)	18.4	17.9	18.8	31.0	31.0	31.0
Receiving home	0.8	0.6	1.0	1.9	2.4	1.5
Shelter or mission	27.6	33.9	22.3	35.8	38.7	33.5
Foster/group home	9.5	13.1	6.4	9.7	13.1	6.9
Juvenile detention	0.3	—	0.5	4.3	3.6	4.9
Abandoned house	6.8	3.6	9.4	18.6	13.1	23.2
Street	14.3	11.3	16.8	25.9	21.4	29.6
Own apartment	1.4	1.8	1.0	2.2	1.8	2.5
Friend (parents there)	1.6	1.2	2.0	4.9	5.4	4.4
Hospital	—	—	—	1.1	1.2	1.0
Other	15.1	12.5	17.3	18.9	17.9	19.7

^aPercentages do not add up to 100% due to multiple responses.

young people indicated that they had stayed on the streets at least once in the previous week. A breakdown by gender revealed that 53% of males reported staying on the street in the previous week whereas for females, the rate was 35%. Staying at a shelter or mission was mentioned by 36% of all adolescents whereas 31% reported staying with friends. Since respondents could have stayed at different locations on separate nights, percentages exceed 100%.

Measures

Age at first run was a single-item indicator which asked adolescents how old they were when leaving home for the first time. Many adolescents were on their own for the first time at a very young age. For the total sample, the age at which these young people left home ranged from 2 to 19 years, with a mean age at first run of 13.3 years (Median = 13.0; SD = 3.0). For females, the mean age for leaving home for the first time was 13.1 years (Median = 13.0 years; SD = 3.0), and among males it was 13.4 years (Median = 14.0 years; SD = 3.0). Although some of these young people indicated that they had left home for the first time at a very young age (i.e., before the age of 5), the majority left home between 13 and 15 years of age.

Number of times run was a single-item measure which asked respondents to report the total number of times that they had run away from home. The number of times that these adolescents had run varied considerably. Although almost one-quarter of the sample (23.4%) reported running away from home on one occasion, 27% of these young people had run away a total of 10 times or more. The number of times that adolescents had run away ranged from 1 to over 98 times with a mean of 9.5 runs (Median = 4.0; SD = 16.3). The mean number of

times that females had run was 10.6 (Median = 4.0; SD = 16.1), whereas for males it was 8.6 times (Median = 3.0; SD = 16.4).

Street time was measured using a single item which asked how often adolescents had slept outdoors over night (not camping) since being on their own. The range of response categories was 0 (never) to 3 (many times). The majority of young people (57%) indicated that they had slept outdoors many times. Only 19% reported never sleeping outside and 18% have done it a few times. Males were more likely to report sleeping outdoors over night (61%) compared to females (53%).

Hard drug use was an 11-item indicator which asked respondents how often they used hard drugs in the past six months. They were asked about 11 types of drugs including: marijuana or hashish, cocaine/crack, acid, mushrooms, ecstasy, crank, heroin/opium, speed/crystal meth, tranquilizers, downers, and sniffing glue/paint. Responses ranged from 0 (not at all) to 6 (every day or nearly every day).

The use of hard drugs by runaway adolescents (Table 2) indicated that 92% of these young people have used marijuana or hashish at least once and 70% reported using acid on at least one occasion. Crystal methamphetamine, mushrooms, cocaine, and crank have also been used by almost half of all respondents. The rates of usage for most drugs were quite similar between males and females.

A factor analysis of the 11 items with a varimax rotation method revealed four components, each consisting of at least two items. The first factor consisted of cocaine, heroin/opium, and tranquilizers, whereas the second component was comprised of marijuana, acid, and mushrooms. The third component included ecstasy, crank, and crystal

Table 2. Percent using hard drugs by gender

	Total	Female	Male
Marijuana or hashish	92.3	92.1	92.4
Cocaine or crack	48.5	48.5	48.5
Acid (LSD)	69.8	68.5	70.9
Mushrooms	52.4	45.5	58.2
Ecstasy	30.3	31.7	29.1
Crank (amphetamines or uppers)	47.9	46.7	49.0
Heroin, opium, or morphine	42.4	38.8	45.4
Crystal meth (amphetamines)	55.4	56.4	54.6
Tranquilizers (valium or librium)	31.3	31.5	31.1
Downers (quaaludes or barbiturates)	23.2	27.0	20.0
Sniffed glue or paint	36.8	38.8	35.2

methamphetamines, and the fourth component consisted of downers and glue sniffing. Each of the 11 items were dichotomized (0 = never and 1 = at least once) due to the skewed distribution of the individual indicators. Due to the sensitive nature of these questions, it is likely that some individuals will not respond to all of the items. However, if a list-wise deletion of missing cases was used to exclude respondents who did not answer every single question, this would have resulted in losing close to one-half of the sample for the hard drug use items. To deal with this problem, a count procedure was used to generate a total number of drugs indicated. Essentially, this procedure scores respondents who did not answer a particular question with a value of 0, instead of system missing, for that item. A code of 0 reflects a response of never taking part in a particular activity thereby giving us a conservative estimate of participation in the target activity. This count procedure permits the

use of the available data from the respondent and, as will be noted, was used with other multiple-item measures where there was some level of non-response. The composite measure for hard drugs had a range of values from 0 to 11 with a mean of 3.2 and a standard deviation of 2.8. A histogram of the hard drug use measure revealed a distribution that was slightly skewed toward the low end.

Deviant subsistence strategies was measured using six items which focused on different tactics that adolescents may have used since being on the street in order to survive. Respondents were asked to indicate how often they, “shoplifted,” “conned,” “robbed someone (threat of violence),” “sold drugs,” “mugged someone (act of violence),” and “broke into a store or house to take things.” Response categories ranged from 1 = never to 5 = on a regular basis.

The use of deviant subsistence strategies by these adolescents revealed that shoplifting was the most frequently used strategy reported by 72% of respondents (Table 3). Fifty-three percent of adolescents reported selling drugs and 50% indicated that they had conned someone in order to get something that they needed. Almost one-quarter of adolescents (23%) reported robbing people and 19% said that they broke into a house or store to take things that they needed. For every category listed, with the exception of shoplifting, males were more likely to engage in deviant subsistence strategies compared to females.

A factor analysis of the six items revealed a one-factor solution. Due to skewness of the individual items, each indicator was dichotomized (0 = never and 1 = at least once). To delete missing cases, a count procedure was done to form a single measure of deviant subsistence strategies. The range of values for this measure was 0 to 6. A histogram revealed a fairly normal distribution for the total sample with a mean of 2.1 (Median = 2.0; SD = 1.8).

Table 3. Percent engaging in deviant subsistence strategies since on own by gender

	Total	Female	Male
Shoplifted	71.9	73.3	70.7
Conned	50.3	42.1	57.7
Robbed someone	23.2	15.2	30.5
Sold drugs	52.5	46.4	57.9
Mugged someone	13.7	7.8	18.8
Broke in and took	19.4	15.4	23.1

This measure was also fairly normally distributed among females, with a mean of 1.9 (Median = 1.0; SD = 1.6) and as well as among males, with a mean of 2.2 (Median = 2.0; SD = 1.9). Cronbach's alpha for deviant subsistence strategies is .73 for the total sample.

Survival sex consisted of seven items which measured whether adolescents had ever traded sex to obtain the things they needed since being on their own. The first six items focused on whether young people had ever traded sex for specific items including food, shelter, cigarettes, alcohol, money, and clothing/blankets. The response categories were 1 = yes and 2 = no. The last item asked respondents how often they had traded sex since being on their own. Responses ranged from 1 = never to 5 = on a regular basis.

Engaging in survival sex on the streets is often a last resort for many young people; they are cold, hungry, and need shelter. The percentage of respondents who ever traded sex to get food, shelter, cigarettes, alcohol, money, and or clothing/blankets (results not shown) revealed that trading sex for money was reported most frequently by all adolescents (4%). Females were most likely to trade sex for shelter (6%) and money (3%). Among males, the

most sought-after item that they were willing to trade sex for was money (5%) followed by food (3%).

In terms of how often adolescents had traded sex, 3% of Seattle's homeless youth indicated that they do so on a regular basis. Five percent of adolescents reported trading sex a few times and just over 2% indicated they had done it many times. Overall, 12% of the sample reported trading sex at least once. In terms of gender, 5% of females and 2% of males reported trading sex on a regular basis. A greater percentage of males (89%) were likely to report never trading sex compared to females (86%).

A factor analysis with a varimax rotation revealed a two-factor component, with the second component consisting of two items: trading sex for alcohol and trading sex for clothing/blankets. The first six indicators, which included trading sex for specific items, were recoded (0 = no and 1 = yes) and then a count procedure was performed to compute a single dichotomous measure where 0 = never traded sex for any specific item and 1 = had traded sex for a specific item. The final indicator, which measured how often the adolescent traded sex, was dichotomized (0 = never and 1 = at least once) and a count procedure was done to delete missing cases. The next step included taking these two single dichotomous measures and summing them to form a composite measure of survival sex. Due to the skewness of this variable, survival sex was dichotomized into 0 = never traded sex and 1 = have traded sex at least once. The final composite measure revealed that 11% of respondents had traded sex for one reason or another. Cronbach's alpha for survival sex is .76.

Deviant peers was a 13-item measure which asked young people if any of their close friends had ever "runaway," "sold drugs," "used drugs," "been suspended or expelled from school," "dropped out of school," "shoplifted," "broke in and took things from a house, store,

etc.,” “took money or something else from someone,” “sold sexual favors for drugs or money,” “sold sexual favors for food or a place to stay,” “been arrested,” “threatened someone with a weapon,” and “assaulted someone with a weapon.” The response categories for each of the items was 0 = no and 1 = yes.

Not only do the Seattle adolescents participate in deviant subsistence strategies, but many of them have close friends who engage in similar types of behaviors (Table 4). In terms of less serious activities, 92% of adolescents reported having close friends who had been suspended from school; 84% have friends who have dropped out of school; and 90% of this sample have peers who have shoplifted. In terms of more serious offenses, the majority of the Seattle sample indicated that their close friends had been arrested (90%), have threatened

Table 4. Percent of peers who have engaged in deviant behaviors by gender

	Total	Female	Male
Runaway	80.6	87.3	74.4
Sold drugs	86.0	88.8	83.3
Used drugs	93.1	92.8	93.5
Been suspended	91.6	92.0	91.1
Dropped out of school	84.0	83.3	84.7
Shoplifted	89.6	88.7	90.4
Broke in and took	66.6	65.8	67.3
Took money	72.2	74.0	70.5
Sold sex for drugs/money	25.8	29.3	22.5
Sold sex for food/shelter	19.8	25.2	14.7
Been arrested	90.1	91.3	89.0
Threatened someone with a weapon	64.9	65.9	63.9
Assaulted someone with a weapon	53.8	53.2	54.3

someone with a weapon (65%), and have assaulted someone with a weapon (54%). Seventy-two percent of these young people reported that their close friends had taken money or something from someone and 67% have close peers who have broke in and took money or objects from another person. Over one-quarter (26%) indicated that a close friend had traded sex for drugs or money and 20% of their friends have traded sex for food or shelter. The rates among males and females are quite similar. That is, females are just as likely as males to have reported having friends who had threatened someone with a weapon, assaulted someone with a weapon, or been arrested. Finally, females were more likely than males to have reported having close friends who had sold drugs (89% versus 83%) and friends who had run away (87% versus 74%).

A factor analysis with a varimax rotation method revealed three different factors. The first component was comprised of seven behaviors which included close friend running away, selling drugs, using drugs, being suspended, dropping out of school, shoplifting, and being arrested. The second component consisted of four items which were more serious types of offenses, including breaking in and taking things, taking money from someone, threatening someone with a weapon, and assaulting someone with a weapon. Finally, the third component was comprised of two items which dealt with selling sex. A count procedure was performed on the 13 items to delete missing cases. The composite scale ranged from 0 to 13. A histogram revealed a skewed distribution at the high end with a mean of 7.6 (Median = 9.0; SD = 4.2). Cronbach's alpha for deviant peers is .87 for the total sample.

Age was measured by asking respondents how old they were at the time of the interview. The ages of these young people ranged from 12 to 21 years with a mean of 17.1 years (Median = 17.0; SD = 2.1).

Gender was coded as 0 = males and 1 = females. There were a total of 203 males (54.6%) and 169 females (45.4%).

Grooming was a two-item indicator which asked the interviewer to respond to two questions regarding the appearance of the youth. The interviewer was asked to answer these questions after the interview and before examining the completed questionnaire. They were also asked to exclude any other information that they may have acquired. The two items included, “what was your impression of this youth’s physical appearance: facial and body features” and “what was your impression of this youth’s physical appearance: grooming, dress, and cleanliness.” Possible responses for these two items ranged from 1 = very unattractive to 5 = attractive. The two grooming items were summed and the composite scale ranged from 4 to 10. The mean for grooming was 7.2 for the total sample (Median = 7.0; SD = 1.4). Similarly, males had a mean of 7.1 for grooming (Median = 7.0; SD = 1.4) and females had a mean of 7.4 for grooming (Median = 7.0; SD = 1.5). Cronbach’s alpha is .62 for grooming.

Sexual victimization consisted of six items which focused on whether respondents had any unwanted or unpleasant sexual experiences with people since they have been on their own. Young people were asked to indicate if anyone, “had you do something sexual or mess around with you sexually when you didn’t want to,” “made you watch them do something sexual when you didn’t want to (e.g. masturbate),” “had you touch them sexually when you didn’t want to,” “had you show your ‘private parts’ in person or for a camera when you didn’t want to,” “kissed or touched you sexually, like on your butt, thigh, breast or genitals (private parts) when you didn’t want them to,” and “put, or tried to put, anything, or any part

of the body into you sexually (like into your vagina, butt, or mouth) when you didn't want them to." Response categories ranged from 1 = never to 4 = many times.

Only one factor was extracted for the six items using a varimax rotation procedure. Due to the skewness of the individual items, each indicator was dichotomized (0 = never and 1 = at least once). A count procedure was then done to delete missing cases and a dichotomous measure of sexual victimization was created (0 = never been sexually victimized and 1 = have been sexually victimized). Overall, 37% of respondents (N = 137) indicated that they had been sexually victimized since being out on their own. Cronbach's alpha for sexual victimization is .81 for the total sample.

Two additional dependent variables were used in these analyses to pinpoint the identity of the perpetrator in cases of sexual victimization on the street. Of those adolescents who were sexually victimized, the question was asked, "since you've been on your own, who was the person who most often did these things to you?" The response categories included 1 = friend, 2 = someone you know (not a friend), 3 = family member, 4 = stranger, and 5 = other.

Friend sexual victimization was computed by combining the first two categories (1 = friend and 2 = someone you know) from the question above and the dichotomous sexual victimization variable. Thus, a dichotomous outcome variable was created where those who were not sexually victimized were coded as 0 and those who were victimized sexually by a friend were coded as 1. Respondents who were sexually victimized by a stranger were coded as missing for this particular measure such that this variable only compared those who were not sexually victimized to those who were sexually victimized by a friend. Overall, 24% of respondents reported being sexually victimized by a friend.

Stranger sexual victimization was computed by combining the fourth and fifth categories (4 = stranger and 5 = other) from the above question and the dichotomous sexual victimization variable. Thus, a dichotomous outcome variable was created where those who were not sexually victimized were coded as 0 and those who were sexually victimized by a stranger were coded as 1. Respondents who were sexually victimized by a friend were coded as missing for this particular measure such that this variable only compared those who were not sexually victimized to those who were sexually victimized by a stranger. Eighteen percent of adolescents indicated that they had experienced stranger sexual assault.

Since the third category (3 = family member) only consisted of one case, this case was coded to missing for the analyses that focused on friend and stranger sexual victimization.

Procedure

The analyses focused on risk factors associated with sexual victimization while on the streets among homeless and runaway adolescents. Due to the dichotomous dependent variables, logistic regression analysis was used to run a series of models. Logistic regression is a mathematical modeling approach that describes the relationship of several independent variables to a dichotomous dependent variable. When estimating the model parameters of a logistic model, maximum likelihood is the procedure that is used (Kleinbaum, Kupper, Muller, & Nizam, 1998).

For the first set of models, the dependent variable was sexual victimization. A series of nested models were run. The first model included only the proximity variables whereas in the second model, the exposure items were added. In the third model, which is the full model, the choice components were added to the pre-existing proximity and exposure variables. A

series of interactions were included to test specific hypotheses regarding the effects of the structural components and the choice components. The interaction terms were added to the full model one at a time to reduce the risk of collinearity. The change in chi square also was computed for the nested models in order to determine if there was an improvement in model fit. Due to list-wise deletion, the sample was reduced to 311 cases for the full model when the outcome variable was sexual victimization.

Two additional sets of logistic regression models were run, using the same procedure described above, but substituting friend sexual victimization for the dependent variable in the second series of models and then substituting stranger sexual victimization for the third series of models. Due to list-wise deletion, the sample was reduced to 258 cases for the full model for both friend and stranger sexual victimization.

In order to help interpret the interactions, the logistic regression equation was used to graph the interaction at high, medium, and low levels of a particular variable (i.e., deviant subsistence strategies, deviant peers, and hard drug use). These values were set at one standard deviation above the mean, at the mean, and one standard deviation below the mean respectively. These values were then substituted into the regression equation (Aiken & West, 1991). Before plotting the regression lines, however, the log odds value for each regression equation was changed to an estimated probability which is easier to interpret.

Residual analysis is used in logistic regression to determine whether certain cases cause the model to work poorly and to decide whether some cases are exerting more than their share of influence on the estimated parameters of the model (Menard, 1995). As a rule of thumb, it is appropriate to perform a limited set of diagnostics on all models in order to determine whether there are weaknesses in our conceptual models (Menard, 1995). In the

current study, diagnostics were conducted for the full models for each of the three dependent variables (i.e., sexual victimization, friend sexual victimization, and stranger sexual victimization). In order to determine whether any influential data points existed, Cook's distance, Leverage values, and DfBetas were used.

CHAPTER V

RESULTS

Univariate Results

Consistent with what previous research has found (cf. McCormack et al., 1986a; Janus et al., 1987; Silbert & Pines, 1981), the adolescents in this sample experienced high levels of sexual abuse prior to running away. Overall, 28% of the current sample indicated that they had been abused sexually. Young women were much more likely to be victims of sexual abuse. Gender differences revealed that 42% of females and 17% of males had suffered from such abuse. More than one-third of adolescents (39%) who experienced early sexual abuse indicated that it was extremely violent whereas 44% reported the sexual abuse as being somewhat violent. Rates of extremely violent sexual abuse tended to be higher among females (43%) compared to males (31%). Further, females were less likely to have reported rates of sexual abuse that were non-violent compared to males (11% versus 29%, respectively).

Not only have these young people experienced high rates of early sexual abuse but many runaways also have experienced sexual victimization. The percentage of adolescents experiencing sexual victimization since being on their own is shown in Table 5. The percentage for each item indicates that such an incident has occurred at least once. Since being on their own, 31% of the sample reported being touched or kissed sexually by an adult at least once and 29% have been forced to do something sexual with an adult on at least one occasion. For females, the most common type of sexual victimization included both being kissed or touched sexually (48%) and having an adult force them to do something sexual (48%). Among males, being kissed or touch sexually by an adult was reported most

Table 5. Percent who have been sexually victimized since being on the street by gender

	Total	Female	Male
Has an adult ever...			
Had you to do something sexual	28.9	48.1	12.8
Made you watch them do something sexual	5.3	8.1	3.0
Had you touch them sexually	11.0	18.0	5.1
Had you show your private parts	5.3	7.4	3.6
Kissed/touched you sexually	30.6	48.1	16.4
Tried to put any part of their body into you	19.8	34.5	7.6

frequently (16%). For every category listed, females were more likely to experience sexual victimization since being out on the street compared to their male counterparts.

Bivariate Results

Table 6 shows the correlation matrix for the total sexual victimization model. Results indicated that sexual victimization was associated with age at first run ($r = -.12$) and number of times run ($r = .14$), suggesting that adolescents who left home at an early age and those who had run away numerous times were more likely to be victims of sexual assault. Sexual victimization also was positively correlated with survival sex ($r = .26$). Finally, gender ($r = .38$) was positively associated with sexual victimization, indicating that females were more likely to be victimized sexually.

Young people who ran from home at an early age were more likely to report having run numerous times ($r = -.35$) and having had engaged in deviant subsistence strategies ($r = -.21$). Adolescents who have left home on numerous occasions were more likely to have engaged in survival sex ($r = .15$) and affiliated with deviant peers ($r = .13$). Young people

Table 6. Correlation matrix for total sexual victimization

	1	2	3	4	5	6	7	8	9	10	11
1. Total sexual victimization	--										
2. Age at first run	-.12*	--									
3. Number of times run	.14*	-.35**	--								
4. Street time	.10	.08	-.03	--							
5. Hard drugs	.10	.08	-.07	.37**	--						
6. DSS*	.05	-.21**	.09	.22**	.29**	--					
7. Survival sex	.26**	-.06	.15**	.11	.00	.14*	--				
8. Age	.01	.23**	-.08	.33**	.13*	.02	.13*	--			
9. Gender	.38**	-.01	.07	-.02	.03	-.16**	.06	-.24**	--		
10. Grooming	.11	-.06	.10	-.32**	-.18**	-.11*	-.12*	-.22**	.09	--	
11. Deviant peers	.04	-.10	.13*	.17**	.23**	.35**	.10	.04	.10	-.18**	--
<u>M</u>	.37	13.34	9.57	2.09	3.16	2.23	.12	17.12	.47	7.27	8.28
<u>SD</u>	.48	2.95	16.89	1.19	2.70	1.73	.33	2.07	.50	1.43	3.66

*DSS stands for deviant subsistence strategies.

*p < .05, **p < .01.

who spent many nights out on the streets also were likely to report higher rates of hard drug use ($r = .37$), having had engaged in deviant subsistence strategies ($r = .22$), being older ($r = .33$), and having been associated with deviant peers ($r = .17$). Finally, being out on the street was correlated with an unkempt physical appearance ($r = -.32$).

The use of hard drugs among runaway adolescents was positively associated with having had engaged in deviant subsistence strategies ($r = .29$) and having had affiliated with deviant peers ($r = .23$). Higher rates of drug use also was more likely among older respondents ($r = .13$) and those with unkempt appearances ($r = -.18$).

Participating in deviant subsistence strategies was found to be related to having engaged in survival sex ($r = .14$) and having been affiliated with deviant peers ($r = .35$). Deviant subsistence strategies also were more common among younger respondents ($r = -.16$) and those with poor grooming ($r = -.11$). Survival sex was found to be associated with age ($r = .13$) and grooming ($r = -.12$). Finally, young people who had clean physical appearances were less likely to have been affiliated with deviant peers ($r = -.18$).

The bivariate associations for the stranger sexual victimization model are shown in Table 7. The results revealed that stranger sexual victimization was positively associated with street time ($r = .14$) and survival sex ($r = .27$) which suggests that adolescents who spend many nights sleeping out on the streets ($r = .27$) and those who trade sex were most likely to be victimized sexually by a stranger. Gender also was found to be positively related to stranger sexual victimization ($r = .23$) which means that young women were more likely to experience stranger sexual assault compared to their male counterparts. The associations among the predictor variables were similar to those reported in the total sexual victimization model.

Table 7. Correlation matrix for stranger sexual victimization

	1	2	3	4	5	6	7	8	9	10	11
1. Stranger sexual victimization	--										
2. Age at first run	-.05	--									
3. Number of times run	-.05	-.35**	--								
4. Street time	.14*	.08	-.12	--							
5. Hard drugs	.11	.05	-.05	.36**	--						
6. DSS*	-.03	-.21**	.09	.22**	.33**	--					
7. Survival sex	.27**	-.04	-.04	.07	.04	.13	--				
8. Age	.07	.23**	-.07	.33**	.13*	.07	.18**	--			
9. Gender	.23**	.10	.05	-.01	.01	-.25**	-.01	-.23**	--		
10. Grooming	.02	-.01	.08	-.35**	-.22**	-.14*	-.08	-.23**	.05	--	
11. Deviant peers	.02	-.09	.13*	.20**	.24**	.32**	.03	.09	.05	-.19**	--
<u>M</u>	.18	13.55	7.37	2.08	3.08	2.14	.09	17.17	.38	7.16	8.20
<u>SD</u>	.38	2.83	13.24	1.21	2.70	1.74	.29	2.18	.49	1.44	3.61

*DSS stands for deviant subsistence strategies.

*p < .05, **p < .01.

The correlation matrix for the friend sexual victimization model is presented in Table 8. The results indicated that being sexually victimized by a friend was associated with gender ($r = .38$) and grooming ($r = .18$), indicating that females and those with clean physical appearances were more likely to be victimized. Friend sexual victimization also was associated with survival sex ($r = .20$) and number of times run ($r = .19$), suggesting that young people who traded sex and those who reported leaving home numerous times were more likely to be victims of friend sexual assault. Adolescents who left home for the first time at a young age also experienced higher rates of friend sexual victimization ($r = -.13$). The associations among the independent variables resembled those reported in the total sexual victimization model.

Multivariate Results

For interpretation purposes, the unstandardized logistic regression coefficient (B) is the change in the dependent variable that is associated with a one unit change in the independent variable (Menard, 1995). The odds ratio ($\text{Exp}(B)$) is the ratio of the probability that some event (e.g., being sexually victimized) will occur divided by the probability that the same event will not occur (e.g., not being sexually victimized) (Kleinbaum et al., 1998). If the odds ratio is greater than one, then the odds of being sexually victimized increase when the independent variable increases. However, when the odds ratio is less than one, the odds of being sexually victimized decreases when the independent variable increases (Menard, 1995).

Table 8. Correlation matrix for friend sexual victimization

	1	2	3	4	5	6	7	8	9	10	11
1. Friend sexual victimization	--										
2. Age at first run	-.13*	--									
3. Number of times run	.19**	-.36**	--								
4. Street time	.03	.10	-.03	--							
5. Hard drugs	.08	.10	-.06	.37**	--						
6. DSS ^a	.09	-.20**	.07	.24**	.29**	--					
7. Survival sex	.20**	-.01	.13*	.13*	.04	.14*	--				
8. Age	-.04	.25**	-.07	.35**	.17**	.04	.08	--			
9. Gender	.38**	.00	.08	-.04	-.02	-.18**	.08	-.28**	--		
10. Grooming	.18**	-.07	.14*	-.32**	-.22**	-.12	-.09	-.24**	.18**	--	
11. Deviant peers	.04	-.07	.13*	.17**	.21**	.31**	.12*	.05	.11	-.19**	--
<u>M</u>	.24	13.40	9.59	2.02	3.06	2.25	.09	17.05	.43	7.29	8.26
<u>SD</u>	.43	2.92	17.19	1.23	2.64	1.72	.29	2.12	.50	1.38	3.63

^aDSS stands for deviant subsistence strategies.

* $p < .05$, ** $p < .01$.

Total Sexual Victimization

The results of the multivariate analyses predicting total sexual victimization are shown in Table 9. Model 1, which included only the proximity variables, revealed that street time was significant ($B = .20$; $\text{Exp}(B) = 1.22$) indicating that those who had spent more time sleeping out on the streets were more likely to be sexually victimized.

Model 2 shows the results for both the proximity variables and the exposure items. Interestingly, none of the proximity variables were significant once the exposure items were added. In terms of the exposure items, however, hard drug use and survival sex were significant suggesting that those with high rates of drug use were more likely to be victims of sexual assault ($B = .12$; $\text{Exp}(B) = 1.13$) as well as those who reported engaging in survival sex. In fact, those who had traded sex were almost five times as likely to be a victim ($B = 1.52$; $\text{Exp}(B) = 4.59$).

Model 3 is the full model which included the proximity, exposure, and choice components. The results revealed that engaging in survival sex significantly increased the odds of becoming a victim of sexual assault ($B = 1.71$; $\text{Exp}(B) = 5.55$). In fact, young people who traded sex were over five and one-half times more likely to be sexually victimized. Moreover, being female and having a clean physical appearance also increased the likelihood of being sexually victimized. That is, females were over seven times more likely to be victims of sexual assault compared to their male counterparts ($B = 1.98$; $\text{Exp}(B) = 7.21$) and adolescents with a clean physical appearance were 1.31 times more likely to be a victim ($B = .27$).

The next three models (Models 4 – 6) are the full models with the addition of an interaction term. Although all possible combinations of the proximity and exposure variables

Table 9. Logistic regression models for predictors of total sexual victimization

	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
	B	Exp(B)	B	Exp(B)	B	Exp(B)	B	Exp(B)	B	Exp(B)	B	Exp(B)
Proximity												
Age at first run	-.06	.94	-.08	.93	-.10	.91	-.09	.91	-.11*	.90	-.10*	.91
Number of times run	.01	1.01	.01	1.01	.01	1.01	.01	1.01	.01	1.01	.01	1.01
Street time	.20*	1.22	.09	1.09	.18	1.19	.16	1.17	.17	1.18	.17	1.18
Exposure												
Hard drugs			.12**	1.13	.09	1.10	.08	1.08	-.04	.96	.10	1.10
DSS ^a			-.10	.90	.07	1.07	-.09	.91	.07	1.07	1.70**	5.46
Survival sex			1.52**	4.59	1.71**	5.55	1.71**	5.55	1.77**	5.86	1.87**	6.47
Choice components												
Age					.14	1.16	.16*	1.17	.18*	1.20	.37**	1.45
Gender					1.98**	7.21	1.18**	3.26	1.33**	3.79	2.04**	7.66
Grooming					.27**	1.31	.27**	1.31	.28**	1.33	.28**	1.32
Deviant peers					-.05	.95	-.06	.95	-.06	.94	-.05	.95
Interactions												
Gender × DSS							.38*	1.47	--	--	--	--
Gender × hard drugs							--	--	.22*	1.24	--	--
Age × DSS							--	--	--	--	-.09*	.91
LR χ^2	450.177		427.501		323.819		318.682		319.708		318.068	
d.f.	3		6		10		11		11		11	
R ²	.03		.09		.24		.26		.25		.26	
R ²	.04		.13		.33		.35		.35		.35	

^aDSS stands for deviant subsistence strategies.

*p < .05, **p < .01.

with the choice components were included as interactions, only those that were significant at the .05 level or below are included in the tables. Results from Model 4, with the interaction term gender \times deviant subsistence strategies added, revealed that engaging in survival sex significantly increased the likelihood of being a victim of sexual victimization ($B = 1.71$; $\text{Exp}(B) = 5.55$). Females also were more likely to be at risk compared to males ($B = 1.18$; $\text{Exp}(B) = 3.26$) as were those with good grooming ($B = .27$; $\text{Exp}(B) = 1.31$). In addition, age also was significant indicating that older respondents were more likely to be victimized compared to their younger counterparts ($B = .16$). In fact, for every one year increase in age, an adolescent's chances of becoming a victim increased by a factor of 1.17 times. The interaction term gender \times deviant subsistence strategies was positive and significant ($B = .38$; $\text{Exp}(B) = 1.47$). Figure 1 revealed that relative to males, females were more likely to be sexually victimized as their participation in deviant subsistence strategies increased. Females also were more likely to experience higher rates of sexual victimization compared to males when participation in deviant subsistence strategies was minimal. The significance of the interaction term and the direction of the differences indicates that engaging in deviant subsistence strategies increases risk of sexual victimization for females, but not for males.

Model 5 presents the results of the full model with the interaction term gender \times hard drug use added. The proximity variable age at first run was significant indicating that those who left home at an early age were more likely to experience sexual victimization ($B = -.11$; $\text{Exp}(B) = .90$). In fact, the odds of being sexually victimized decreased by 10% for those who ran from home for the first time at a later age. Engaging in survival sex increased these young people's chances of being a victim by almost six times ($B = 1.77$; $\text{Exp}(B) = 5.86$). Similar to previous models, being older ($B = .18$; $\text{Exp}(B) = 1.20$), female ($B = 1.33$; $\text{Exp}(B)$

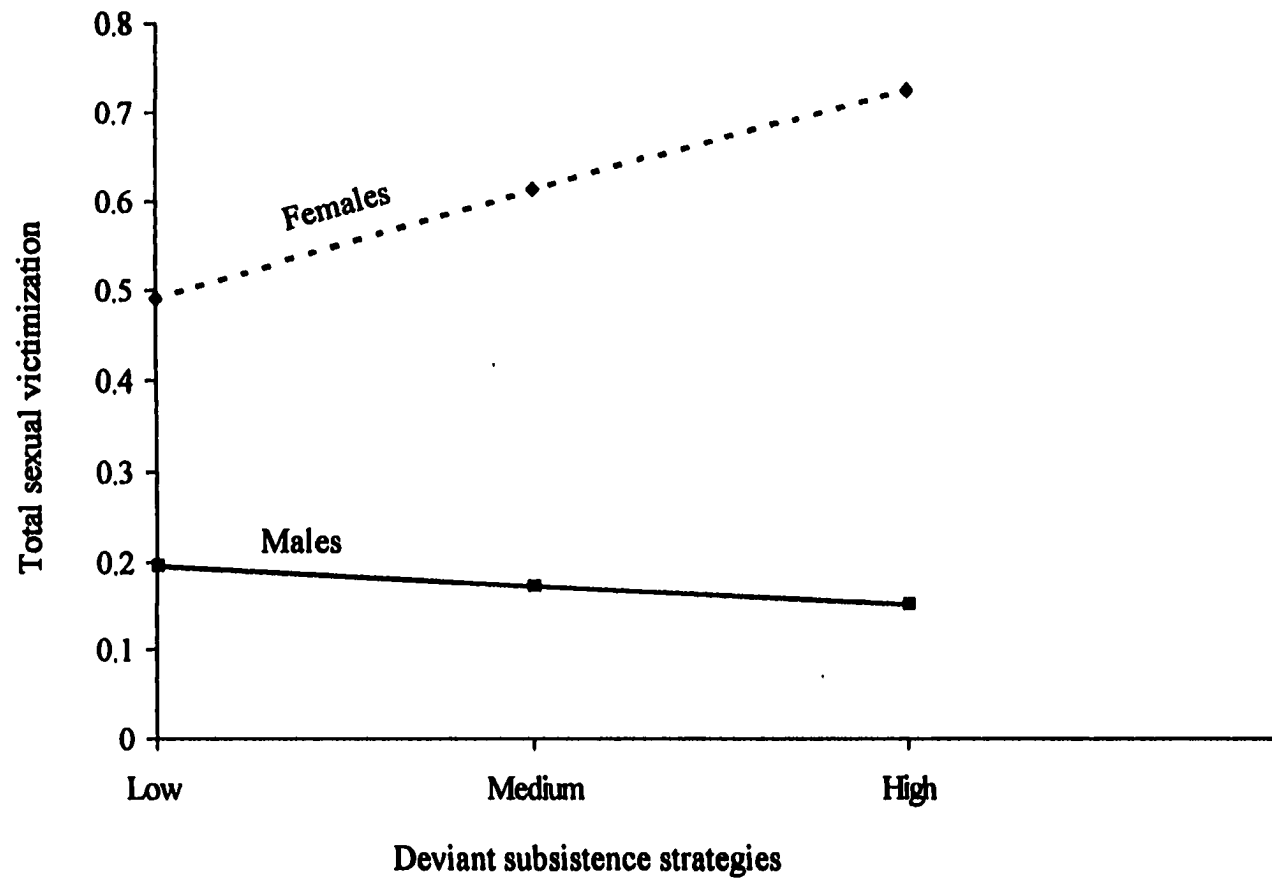


Figure 1. Gender x deviant subsistence strategies for total sexual victimization

= 3.79), and having a clean physical appearance ($B = .28$; $\text{Exp}(B) = 1.33$), all significantly increased the odds of being sexually victimized. The interaction term gender \times hard drug use was positive and significant ($B = .22$; $\text{Exp}(B) = 1.24$). As revealed in Figure 2, the effects of drug use on sexual victimization differed by gender. Relative to males, females were more likely to be sexually victimized as their use of hard drugs increased. A test of the individual slopes revealed that females experienced higher rates of victimization as their drug use increased whereas among males, increasing drug use did not affect level of sexual victimization.

The findings from Model 6, which contained the age \times deviant subsistence strategies interaction term, were similar to previous models. In terms of the proximity variables, being out on the street at an early age was found to increase ones' chances of being victimized ($B = -.10$; $\text{Exp}(B) = .91$). For the exposure items, selling sex ($B = 1.87$) significantly increased the odds of becoming a victim. In fact, those who engaged in survival sex were almost six and one-half times more likely to be sexually assaulted compared to those who did not engage in such an activity. Deviant subsistence strategies also was significant in this model ($B = 1.70$) indicating that those who engaged in such activities were approximately five and one-half times more likely to be victims of sexual assault. Under the choice components, being older ($B = .37$; $\text{Exp}(B) = 1.45$) and having a clean physical appearance ($B = .28$; $\text{Exp}(B) = 1.32$) significantly increased the odds of sexual victimization. The biggest risk factor, however, appeared to be gender. That is, females were over seven and one-half times more likely to be sexually victimized compared to their male counterparts ($B = 2.04$; $\text{Exp}(B) = 7.66$). Finally, the interaction term age \times deviant subsistence strategies was

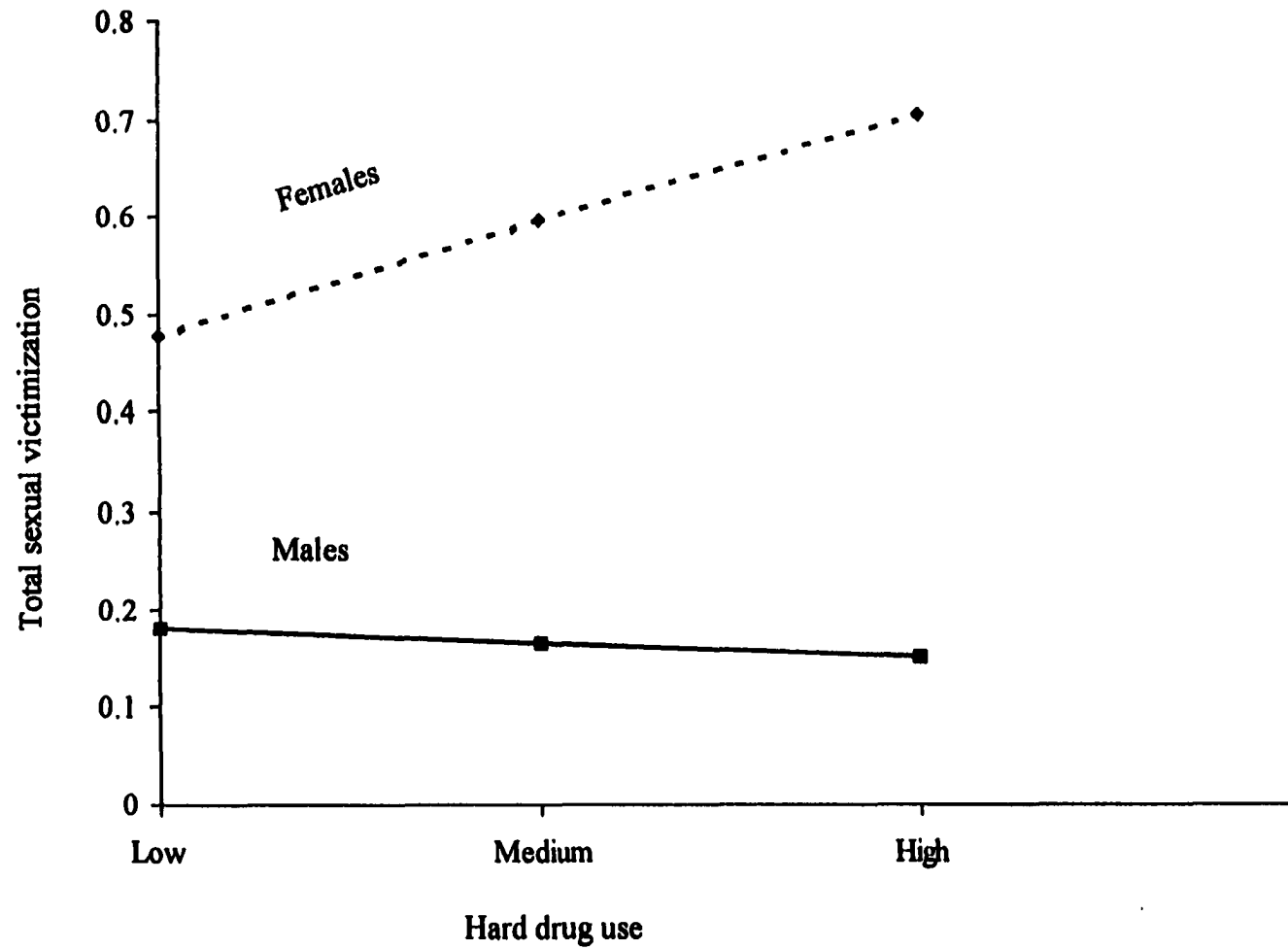


Figure 2. Gender x hard drug use for total sexual victimization

negative and statistically significant ($B = -.09$; $\text{Exp}(B) = .91$). The pattern of this interaction effect, which is demonstrated in Figure 3, revealed that the effects of deviant subsistence strategies on sexual victimization differed significantly among the three age groups. The younger aged youth experienced the lowest levels of sexual victimization when their participation in deviant subsistence strategies was at a low. In contrast, 19-year-old youth experienced the highest rates of sexual victimization when participation in deviant subsistence strategies was at its lowest. For the middle age group, increases in deviant subsistence strategies appeared to have little affect on sexual victimization. Thus, the association between involvement in deviant subsistent strategies and increased risk for sexual victimization appears to be present only among the younger adolescents.

The interaction term grooming \times deviant subsistence strategies (results not shown) also was significant using a one-tail test criterion ($B = .11$; $\text{Exp}(B) = 1.11$). This finding suggests that those who were highest on grooming were more likely to be sexually victimized as their participation in deviant subsistence strategies increased in comparison to those who were low or average on grooming.

Since the principal concern is to test the theory of whether the inclusion of first the exposure items and then the choice components significantly improve the fit of the model over only having the proximity items included, nested models are compared. The change in chi square between models is compared using $-2 \log$ likelihood and degrees of freedom to determine whether the change is statistically significant.

A comparison of the nested models for Table 9 revealed that the change in chi square from Model 1 to Model 2 was statistically significant (Table 10). This suggests that adding the exposure items significantly improved the fit of the model. The next column,

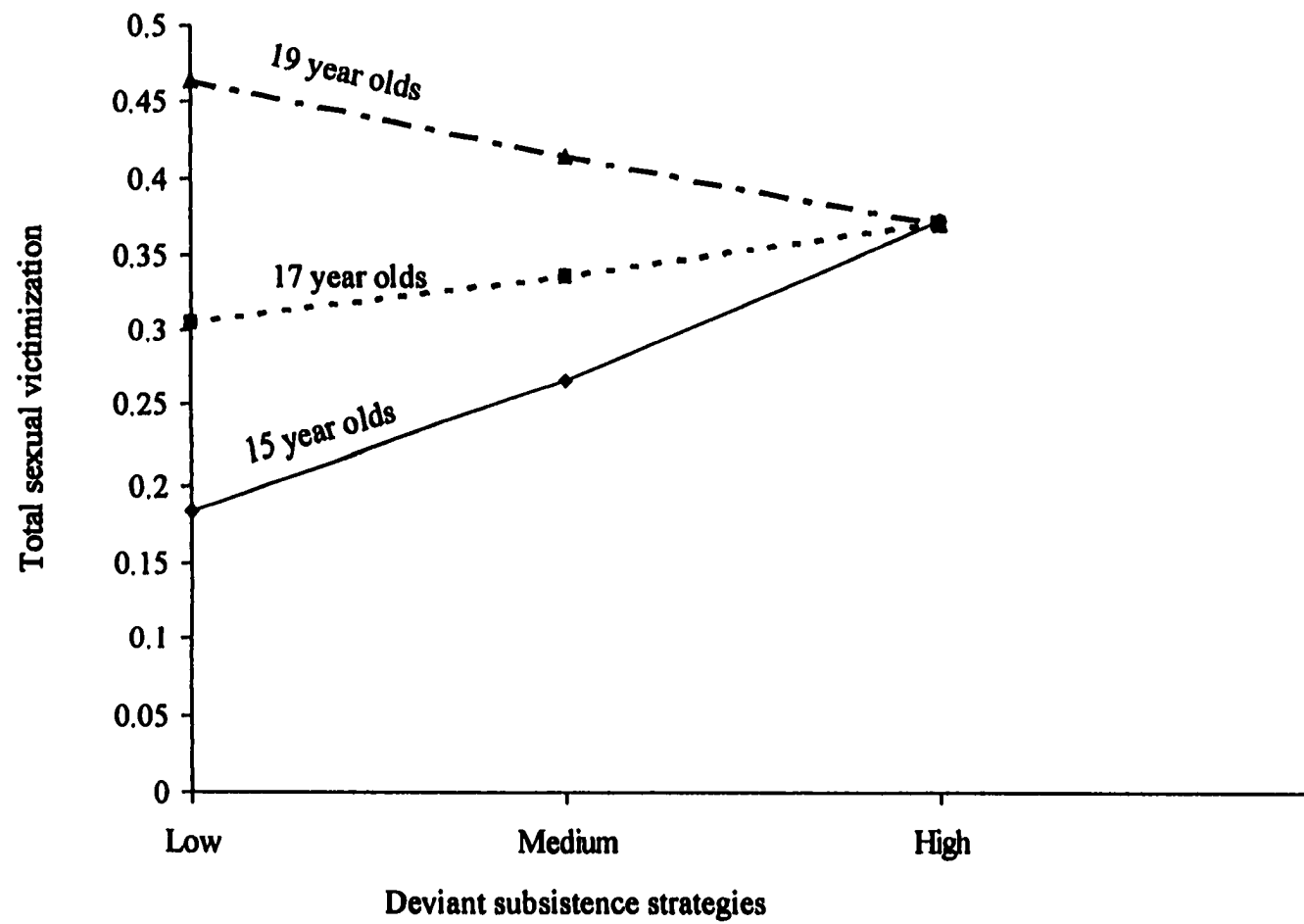


Figure 3. Age x deviant subsistence strategies for total sexual victimization

Table 10. Comparison of nested models for total sexual victimization

	(Δ in χ^2) M1 \rightarrow M2	(Δ in χ^2) M2 \rightarrow M3	(Δ in χ^2) M3 \rightarrow M4	(Δ in χ^2) M3 \rightarrow M5	(Δ in χ^2) M3 \rightarrow M6
Log likelihood	22.676	103.682	5.137	4.111	5.751
d.f.	3	4	1	1	1
Probability	p < .001	p < .001	p < .05	p < .05	p < .05

which compared Model 2 to the full model (Model 3), also revealed a significant improvement in fit, suggesting that the choice component variables also significantly improved the fit of Model 3 over only having the exposure and proximity items in the model. When adding the interaction terms, changes in chi square between Models 3 and 4, between Models 3 and 5, and between Models 3 and 6, were all significant, indicating an improvement in model fit. This suggests that the interaction terms, which were a combination of the choice components and the exposure items, significantly improved the fit of the model thereby providing support for the structural-choice theory of victimization (Miethe & Meier, 1990).

Stranger Sexual Victimization

In the following set of models, stranger sexual victimization was the dependent variable (Table 11). Once again, nested models were used to compare the relative contribution of each set of variables to the previous model. In Model 1, street time was significant indicating that youths who spent many nights sleeping out on the streets were one and one-half times more likely to be sexually victimized by a stranger ($B = .41$).

Model 2, which added the exposure items, revealed once again that sleeping out on the streets significantly increased the odds of being victimized by a stranger ($B = .37$;

Exp(B) = 1.45). In terms of the exposure items, having high rates of hard drug use ($B = .14$; $\text{Exp}(B) = 1.15$) also increased the likelihood of being sexually assaulted by a stranger. Those who engaged in survival sex also were at risk. That is, young people who traded sex were over six times more likely to be assaulted sexually by a stranger compared to those who did not trade sex ($B = 1.82$; $\text{Exp}(B) = 6.16$). Finally, respondents who had low levels of participation in deviant subsistence strategies were more likely to be victims of stranger sexual assault ($B = -.29$; $\text{Exp}(B) = .75$). In other words, the odds of being sexually victimized decreased by 25% when participation in deviant subsistence strategies increased.

Table 11. Logistic regression models for predictors of stranger sexual victimization

	Model 1		Model 2		Model 3	
	B	Exp(B)	B	Exp(B)	B	Exp(B)
Proximity						
Age at first run	-.08	.93	-.10	.90	-.14*	.87
Number of times run	-.03	.98	-.02	.98	-.02	.98
Street time	.41**	1.50	.37*	1.45	.42*	1.52
Exposure						
Hard drugs			.14*	1.15	.09	1.10
DSS*			-.29**	.75	-.14	.87
Survival sex			1.82**	6.16	1.93**	6.91
Choice components						
Age					.14	1.15
Gender					1.64**	5.15
Grooming					.21	1.23
Deviant peers					-.02	.98
LR χ^2	246.873		227.514		180.516	
d.f.	3		6		10	
R ²	.04		.10		.16	
R ²	.06		.17		.26	

*DSS stands for deviant subsistence strategies.

* $p < .05$, ** $p < .01$.

The findings from Model 3, which added the choice components, revealed that age at first run was negatively associated with stranger victimization ($B = -.14$; $\text{Exp}(B) = .87$). In effect, this means that the earlier age at which the youth left home, the greater the likelihood of victimization. Sleeping outdoors on many occasions ($B = .42$; $\text{Exp}(B) = 1.52$) significantly increased the odds of being sexually victimized by a stranger. Adolescents who sold sex were almost seven times more likely to experience stranger sexual victimization ($B = 1.93$; $\text{Exp}(B) = 6.91$). In terms of the choice components, gender was the only variable that predicted victimization. That is, females were more likely to be victimized sexually by a stranger compared to males by multiplicative odds of over five times ($B = 1.64$; $\text{Exp}(B) = 5.15$).

The interaction gender \times hard drug use (results not shown) was significant using a one-tail test criterion ($B = .26$; $\text{Exp}(B) = 1.30$). This finding suggests that compared to males, females were more likely to be sexually victimized by a stranger as their use of drugs increased. Females also were more likely to report higher rates of stranger sexual victimization compared to their male counterparts when drug use was at a low level.

A comparison of nested models for stranger sexual victimization are shown in Table 12. The results revealed that the change in chi square from Model 1 to Model 2 was statistically significant suggesting that the addition of the exposure items significantly improved the fit of the model over only having the proximity items included. The change in chi square also was significant when comparing Models 2 and 3 which means that the addition of the choice component variables significantly improved the fit of the model over only having the proximity and exposure items included.

Table 12. Comparison of nested models for stranger sexual victimization

	(Δ in χ^2) M1 \rightarrow M2	(Δ in χ^2) M2 \rightarrow M3
Log likelihood	19.359	46.998
d.f.	3	4
Probability	$p < .001$	$p < .001$

Friend Sexual Victimization

The final set of models used friend sexual victimization as the outcome variable (Table 13). Model 1, which included the proximity variables, revealed that the more times that the adolescent ran away from home, the greater the chance of being sexually victimized by a friend ($B = .02$; $\text{Exp}(B) = 1.02$).

Model 2, which combined both proximity and exposure items, indicated that hard drug use ($B = .11$; $\text{Exp}(B) = 1.12$) and survival sex ($B = 1.27$; $\text{Exp}(B) = 3.56$) were associated with friend sexual assault. That is, young people who had high rates of drug use and those who engaged in survival sex were more likely to have been sexually victimized by a friend. In fact, adolescents who participated in selling sex were over three and one-half times more likely to have reported being sexually victimized.

The full model (Model 3), which included all three blocks of variables, revealed that deviant subsistence strategies and survival sex were positively associated with friend sexual victimization. That is, young people who engaged in deviant subsistence strategies were more likely to have been sexually victimized by a friend ($B = .23$; $\text{Exp}(B) = 1.26$) as were those who engaged in survival sex ($B = 1.24$; $\text{Exp}(B) = 3.45$). In terms of the choice components, those who were characterized as having good grooming were one and one-third times more likely to have reported friend sexual victimization ($B = .32$; $\text{Exp}(B) = 1.37$).

Table 13. Logistic regression models for predictors of friend sexual victimization

	Model 1		Model 2		Model 3		Model 4		Model 5	
	B	Exp(B)	B	Exp(B)	B	Exp(B)	B	Exp(B)	B	Exp(B)
Proximity										
Age at first run	-.06	.94	-.07	.93	-.07	.93	-.06	.94	-.08	.92
Number of times run	.02*	1.02	.02	1.02	.02	1.02	.02	1.02	.02	1.02
Street time	.06	1.06	-.08	.92	-.02	.98	-.04	.96	-.04	.96
Exposure										
Hard drugs			.11*	1.12	.10	1.10	.08	1.09	.10	1.11
DSS*			.01	1.01	.23*	1.26	.03	1.03	2.14*	8.47
Survival sex			1.27**	3.56	1.24*	3.45	1.22*	3.40	1.36**	3.90
Choice components										
Age					.18	1.20	.19	1.21	.47**	1.59
Gender					2.34**	10.39	1.34*	3.82	2.43**	11.32
Grooming					.32*	1.37	.33*	1.39	.32*	1.37
Deviant peers					-.06	.94	-.06	.94	-.06	.94
Interactions										
Gender × DSS							.42*	1.52	--	--
Age × DSS							--	--	-.11*	.90
LRχ^2	308.542		296.813		219.526		215.665		214.919	
d.f.	3		6		10		11		11	
R²	.03		.07		.23		.24		.24	
R²	.05		.11		.34		.36		.36	

*DSS stands for deviant subsistence strategies.

*p < .05, **p < .01.

Finally, females were over 10 times more likely, compared to males, to have been victimized sexually by a friend ($B = 2.34$; $\text{Exp}(B) = 10.39$).

Model 4 is the full model with the interaction term gender \times deviant subsistence strategies added. Results indicated that those who sold sex ($B = 1.22$; $\text{Exp}(B) = 3.40$) and young women ($B = 1.34$; $\text{Exp}(B) = 3.82$) were over three times as likely to be victims of friend sexual assault compared to males and those who did not trade sex. Youths who had good grooming also were more likely to be at risk ($B = .33$; $\text{Exp}(B) = 1.39$). The interaction term gender \times deviant subsistence strategies was positive and statistically significant ($B = .42$; $\text{Exp}(B) = 1.52$) indicating that a young woman's chances of being a victim of friend sexual victimization elevated significantly as her participation in deviant subsistence strategies increased (Figure 4). Among young men, however, high involvement in deviant subsistence strategies had little affect on friend sexual victimization. Females also were more likely to have experienced higher levels of friend sexual victimization compared to their male counterparts when participation in deviant subsistence strategies was minimal.

The final model in this series (Model 5) added the age \times deviant subsistence strategy interaction term. Similar to previous models, engaging in deviant subsistence strategies ($B = 2.14$; $\text{Exp}(B) = 8.47$) and having sold sex ($B = 1.36$; $\text{Exp}(B) = 3.90$) increased one's chances of friend sexual assault. In fact, adolescents who engaged in deviant subsistence strategies were almost eight and one-half times more likely to become victims. The choice components in this model indicated that age, gender, and grooming were all significantly associated with friend sexual victimization. That is, older respondents were over one and one-half times more likely to be victims ($B = .47$; $\text{Exp}(B) = 1.59$). Youths with clean physical appearances also were likely to be at increased risk ($B = .32$; $\text{Exp}(B) = 1.37$). The

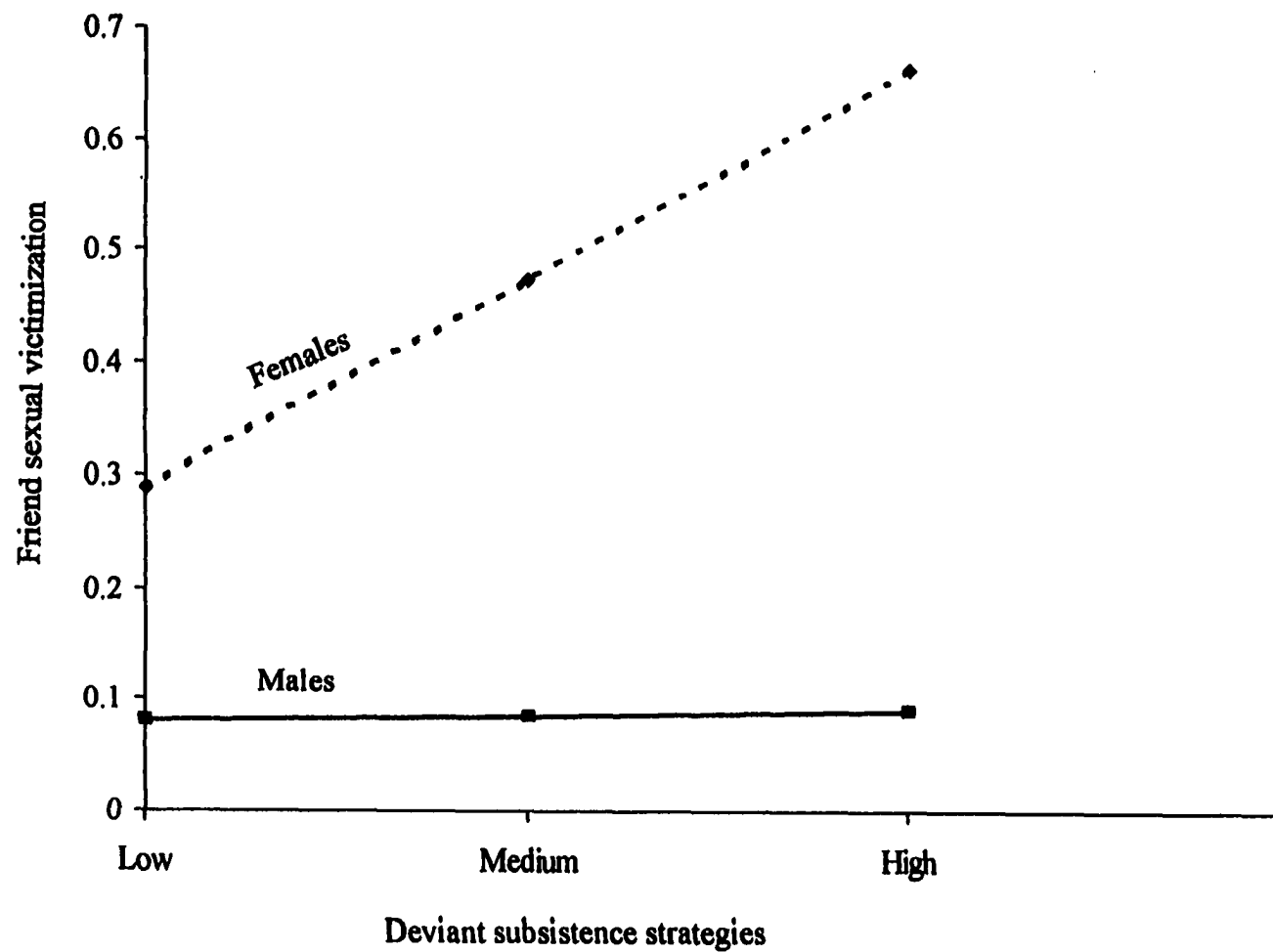


Figure 4. Gender x deviant subsistence strategies for friend sexual victimization

group that was most likely to be in danger, however, were females. In fact, young women were over 11 times more likely to have been sexually victimized by a friend compared to their male counterparts ($B = 2.43$; $\text{Exp}(B) = 11.32$). The interaction term age \times deviant subsistence strategies was negative and significant ($B = -.11$; $\text{Exp}(B) = .90$). As revealed in Figure 5, 19-year-olds had the highest rates of friend sexual victimization. This victimization appeared to remain quite constant regardless of their level of participation in deviant subsistence strategies. Among 15 and 17-year-olds, however, the likelihood of having been sexually victimized by a friend was found to elevate as rates of deviant subsistence strategies increased. Fifteen year olds were found to have the lowest rates of friend sexual victimization when their participation in deviant subsistence strategies was minimum. Overall, high levels of participation in deviant subsistence strategies resulted in high levels of sexual victimization among all age groups.

Three additional interaction terms were found to be significant based on a one-tail test (results not shown). The interaction term grooming \times hard drug use ($B = .07$; $\text{Exp}(B) = 1.08$) revealed that those who were high on grooming experienced higher levels of friend sexual victimization when drug use was maximized. Rates of friend sexual victimization did not appear to change among youth who were low or average on grooming, regardless of their level of hard drug use.

The interaction of grooming \times deviant subsistence strategies also was significant ($B = .13$; $\text{Exp}(B) = 1.14$) suggesting that those with clean physical appearances were more likely to be sexually victimized by a friend when participation in deviant subsistence strategies was high. Among those young people who were low on grooming however, increased participation in deviant subsistence strategies had little affect on friend sexual

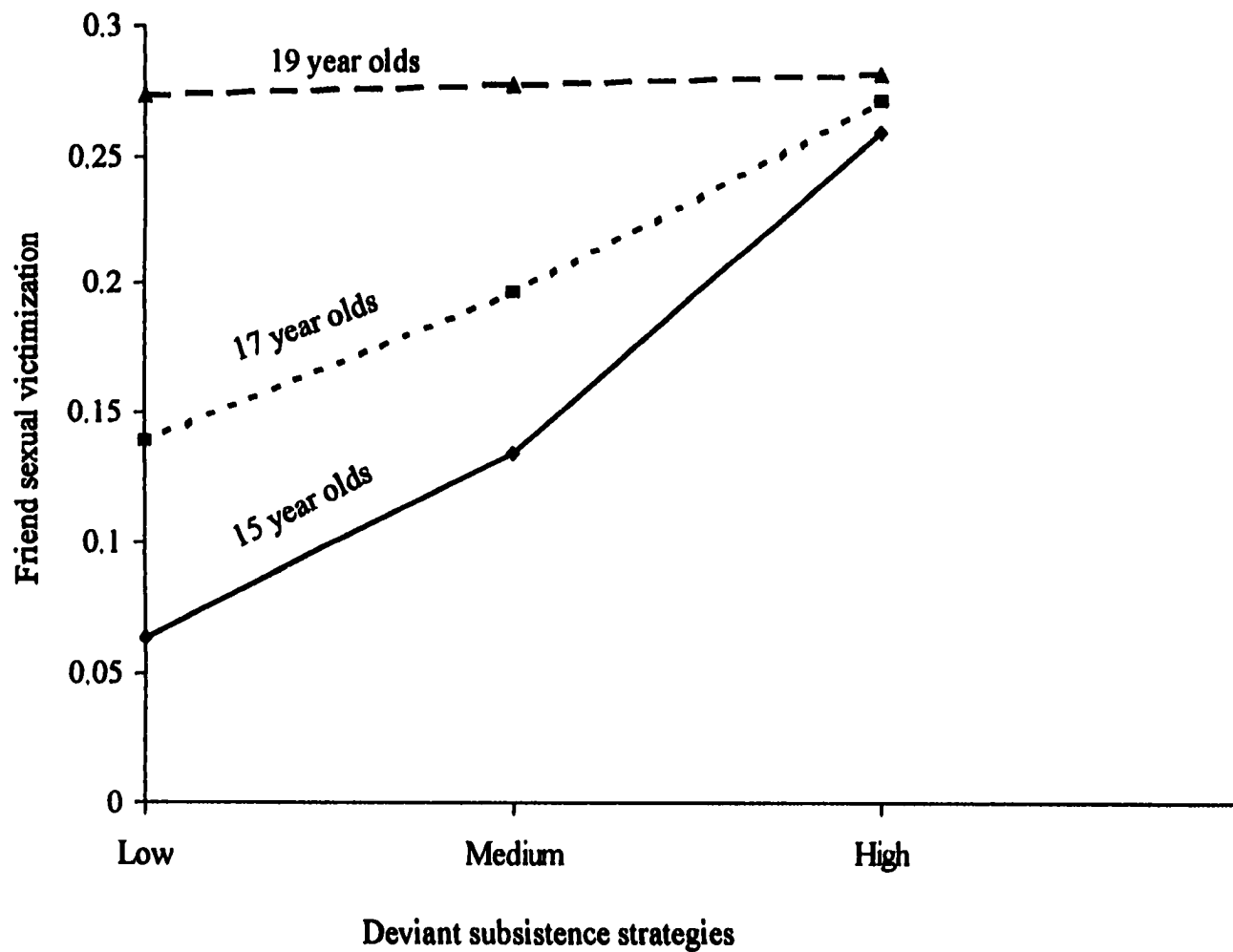


Figure 5. Age x deviant subsistence strategies for friend sexual victimization

victimization. The effect of low deviant subsistence strategy participation on friend sexual victimization did not appear to differ by level of physical appearance.

Finally, the interaction term selling sex \times deviant peers was found to be associated with friend sexual victimization using a one-tail test criterion ($B = .26$; $\text{Exp}(B) = 1.29$).

Young people who sold sex were much more likely to have been sexually victimized by a friend if they had high deviant peer affiliation relative to those who had not sold sex.

Comparing nested models for friend sexual victimization (Table 14) revealed a significant improvement in model fit between Models 1 and 2 when adding the exposure items. A comparison of Model 2 and Model 3 also revealed a highly significant chi square value indicating that the choice components significantly improved the fit of the model over only having the proximity and exposure items included. Finally, a comparison of Models 4 and 5 with the full model (Model 3) revealed that adding the interaction terms significantly improved overall model fit.

Table 14. Comparison of nested models for friend sexual victimization

	(Δ in χ^2) M1 \rightarrow M2	(Δ in χ^2) M2 \rightarrow M3	(Δ in χ^2) M3 \rightarrow M4	(Δ in χ^2) M3 \rightarrow M5
Log likelihood	11.729	77.287	3.861	4.607
d.f.	3	4	1	1
Probability	$p < .01$	$p < .001$	$p < .05$	$p < .05$

CHAPTER VI

DISCUSSION AND CONCLUSIONS

Consistent with previous research (Janus et al., 1987; McCormack et al., 1986a; McCormack et al., 1986b), the univariate results from the current study revealed that many of these runaway adolescents have experienced early childhood sexual abuse. Overall, 28% of these young people indicated that they had been abused sexually. Furthermore, females experienced much higher rates (42%) compared to their male counterparts (17%). Of those who were abused, the majority classified the sexual abuse as somewhat violent or extremely violent. However, females were more likely to have reported sexual abuse that was extremely violent compared to males.

Many young people in this study also experienced various forms of sexual victimization once out on the streets. Females were more likely to experience higher rates of sexual victimization compared to males for every category listed. These univariate findings also are consistent with previous research where the rates of sexual assault or rape among runaways are much higher among younger women compared to younger men (Whitbeck & Simons, 1990, 1993).

The multivariate models focused on the effects of proximity, exposure, and the choice components on total sexual victimization, friend sexual victimization, and stranger sexual victimization. The major findings for each of the three outcome variables are reviewed below.

Major Findings

Total Sexual Victimization

The findings from the full model for total sexual victimization revealed that the proximity items had little affect on overall sexual victimization contrary to what was hypothesized. That is, age at first run, number of times run, and street time did not significantly predict sexual victimization. It is possible that being out on the street increased risk but since all respondents were homeless, there was little variability across street youth due to the fact that their day-to-day activities are generally carried out in areas that are in close proximity to potential offenders (Hoyt et al., in press).

Among the exposure items, engaging in survival sex was found to be strongly associated with sexual victimization which is consonant with previous research (Weisberg, 1985; Whitbeck & Simons, 1990, 1993). Participating in survival sex results in these young people being highly visible and accessible which puts these adolescents in vulnerable situations where there is an increased risk for sexual victimization.

In terms of the choice components, gender and grooming were found to be associated with sexual victimization. Consistent with the literature and with what was hypothesized, females were sexually victimized at a higher rate compared to males (Whitbeck & Simons, 1990; Whitbeck et al., 1997). Street exposure increases risk and women are more likely to be the victims of sexual exploitation and sexual victimization (Whitbeck & Simons, 1990). In terms of grooming, those who had clean physical appearances were more likely to have experienced higher rates of sexual victimization. According to victimization theories, more attractive targets will be chosen over less attractive targets (Miethe & Meier, 1994). Considering that sexual victimization is our outcome variable, it seems likely that

adolescents who have clean physical appearances and those who are female are viewed as more attractive targets. In other words, good grooming and being female are characteristics that are congruent with the needs of the offender (Finkelhor & Asdigian, 1996). As such, those who possess such characteristics are more likely to become victims.

A comparison of nested models revealed that there was a significant improvement in model fit over the baseline model when adding the exposure items. This finding suggests that proximity alone does not account for the increase in sexual victimization but the exposure items, which include deviant behaviors, also are important in understanding the victimization process.

There also was a significant improvement in model fit when adding the choice components to the proximity and exposure items. This finding suggests that not only were the proximity and exposure items important in determining who was at risk but the choice components also played a very important role. This implies that the motives of the offender are important in determining who will become a victim (Miethe & Meier, 1994). That is, offenders are likely to choose targets who they view as attractive for different reasons. For example, the characteristic of being female may be congruent with the needs of the sexual offender (Finkelhor & Asdigian, 1996) therefore females are more likely to be at risk for sexual victimization compared to males. Although being out on the street and engaging in deviant behaviors may increase the risk for sexual victimization, clearly the motives of the offender play a key role in this process. This implies that it is the combination of these factors (i.e., exposure and choice components) that increases the risk for sexual victimization.

The importance of the combination of these factors is apparent when we look to the interactions. For example, deviant subsistence strategies alone did not predict sexual

victimization in the full model but when combined with some of the choice components, deviant subsistence strategies did make a contribution. That is, the interaction term gender \times deviant subsistence strategies revealed that the effect of deviant subsistence strategies on sexual victimization differed significantly for males and females. Relative to young men, young women experienced higher sexual victimization with increasing participation in deviant subsistence strategies. The significance of deviant subsistence strategies when combined with gender suggests that engaging in such behaviors and being female is likely to increase the risk for sexual victimization.

The interaction term age \times deviant subsistence strategies also was significantly related to sexual victimization. Once again, it appears that it is the combination of deviant subsistence strategies with one of the choice components that determines who will be a victim. The results from this interaction revealed that the effects of deviant subsistence strategies on sexual victimization differed significantly among the three different age groups. The 19-year-olds had the highest rates of sexual victimization compared to other age groups when participation in deviant subsistence strategies was minimal. It is possible that the 19-year-olds have been on the streets for a longer period of time which means they have been at risk longer. The combination of age and participation in deviant subsistence strategies appears to increase the risk for being sexually victimized.

The full model revealed that the use of hard drugs was not associated with being a victim of sexual assault but when combined with gender, drug use was found to have an impact. That is, the gender \times hard drug use interaction term was statistically significant suggesting that the effect of hard drug use on sexual victimization varied by gender. A test of the individual slopes revealed that even as drug use increased, level of sexual victimization

remained relatively constant for males. In other words, males did not experience an increase in sexual victimization with increasing drug use. Among females, however, increasing drug use was found to significantly increase their risk for sexual victimization. This finding suggests that even though males and females may be engaging in similar types of activities at the same rate, young women are more likely to be the victims of sexual assault. According to Finkelhor and Asdigian (1996), femaleness is a characteristic that is congruent with the needs of the sexual offender therefore, young women are more likely to be the victims of sexual assault.

Stranger Sexual Victimization

The findings from the full model for stranger sexual victimization revealed that in terms of the proximity items, age at first run and street time were associated with stranger sexual victimization which is consistent with our hypotheses. The age at which adolescents first leave home is a crucial factor in determining the amount of risk and exposure that they will experience. Young people who run away at an early age are likely to spend more time out on the streets and being in a street environment increases their chances of being sexually victimized, especially young women (Whitbeck & Simons, 1990). Consistent with previous research, adolescents who spend more time out on the streets are likely to be pulled into illegal activities (Kufeldt & Nimmo, 1987) and are more likely to be at risk for victimization (Whitbeck et al., 1997, in press). Our findings also revealed that street time was associated with stranger sexual victimization. Sleeping on the streets puts adolescents in dangerous and vulnerable situations where they are exposed to potential offenders. The likelihood of being victimized sexually by a stranger is likely to increase as the amount of time spent on the street and sleeping outdoors increases.

Contrary to what was hypothesized, the number of times that the adolescent runs from home was not significantly associated with stranger sexual victimization. Since the majority of the Seattle sample could be classified as chronic runaways, which means they have run away a total of three times or more, it is likely that there is little variability across the sample in terms of this proximity item. In contrast, since many of these kids have never slept out on the streets or have only done so on one occasion, it is possible that street time has more variability and therefore is a stronger indicator of stranger sexual victimization.

In terms of the exposure items, engaging in survival sex was found to be strongly associated with stranger sexual victimization. Selling sex puts these young people in a position where they are highly visible and accessible to those passing by and this is likely to increase the risk for stranger sexual victimization. Since many of these young people only become involved in trading sex as a last resort (Silbert & Pines, 1982), many of them are desperate and have little control in terms of who they select as their customers. Being young and inexperienced when it comes to participating in survival sex may result in increased stranger sexual victimization. This finding is consistent with previous research which finds that many young adolescent prostitutes report experiencing high rates of victimization from both customers and/or pimps (Weisberg, 1985).

Contrary to what was hypothesized, hard drug use was not associated with stranger sexual victimization. One possible explanation for this finding is that many runaways have friends with high rates of alcohol and drug use and many report using substances in order to feel at ease in social situations (Koopman et al., 1994). Since many runaways are first introduced to illicit drugs by a friend (Kipke, Unger, Palmer, & Edgington, 1996), it is likely that many of these young people are engaging in drug use in the company of their peers. The

presence of friends when engaging in such an activity may serve as a protective factor thereby decreasing the risk of stranger sexual victimization when engaging in drug use.

Engaging in deviant subsistence strategies was not associated with stranger sexual victimization as was expected. Since deviant subsistence strategies included behaviors that typically took advantage of others (e.g., conning and mugging), it is possible that these young people were the ones who were doing the victimizing and as such, were less likely to be the victims of stranger sexual assault.

In terms of the findings for the choice components, gender was the only item that was associated with stranger sexual victimization. Consistent with previous research, females were more likely to be at risk for sexual victimization compared to their male counterparts (Whitbeck et al., 1997). It is likely that given the nature of our outcome variable, the characteristic of being female is congruent with the needs of the sexual offender (Finkelhor & Asdigian, 1996) therefore, females are more likely to be at risk.

A comparison of nested models revealed that the addition of the exposure items to the baseline model significantly improved model fit. This suggests that being out on the street is not the only factor that is important in terms of stranger sexual victimization but the types of activities that these young people are engaging in also are important.

The full model was a significant improvement in fit over the previous model. This suggests that in order to understand the process of stranger sexual victimization, we need to focus not only on what the adolescent is doing but also on the motives of the offender. In other words, characteristics of the potential victim that the offender finds attractive (e.g., gender) are important in determining risk. Since the focus is on sexual victimization, females

are likely to be at higher risk since this is a characteristic in which offenders find congruent with their needs (Finkelhor & Asdigian, 1996).

There were no significant interactions for stranger sexual victimization suggesting that the rate of victimization did not differ for any particular group based on participation in a particular activity. Rather, those who have spent time out on the streets, those who have engaged in survival sex, and females, were most likely to be at risk for stranger sexual victimization.

Friend Sexual Victimization

Contrary to what was expected, the findings from the full model for friend sexual victimization revealed that the proximity items had little influence on the likelihood of being sexually victimized by a friend. That is, age at first run, number of times having run, and street time, were not significantly associated with friend sexual victimization. Once again, it is possible that spending more time out on the street does increase risk but since all respondents are homeless, it is likely that little variability exists across street youth. In other words, the majority of youth engage in their day-to-day activities out on the streets in close proximity to potential offenders (Hoyt et al., in press).

In terms of the exposure items, engaging in deviant subsistence strategies was found to be positively associated with friend sexual victimization which is consistent with what was hypothesized. Research also has demonstrated support for this finding such that those who are engaging in deviant behaviors are more likely to experience victimization (Lauritsen et al., 1991; Whitbeck & Simons, 1990; Whitbeck et al., 1997; in press). Although engaging in deviant subsistence strategies did not predict stranger sexual victimization due to the fact that these young people were likely to be the ones who were doing the victimizing, the process

appears to operate differently when the focus is friend sexual victimization. The literature finds a significant association between affiliating with deviant peers and engaging in deviant subsistence strategies (Whitbeck & Simons, 1990; Whitbeck et al., 1997, in press). Furthermore, Hagan and McCarthy (1997) have found that many runaways become embedded in criminal street networks where they are exposed to mentors and tutors who transmit the skills of criminal capital which facilitates the newcomer's involvement in crime. Since many of these young people are exposed to deviant subsistence strategies by their peers and report engaging in the same types of deviant behaviors (e.g., selling drugs and conning), it seems plausible that the Seattle respondents and their deviant peers are engaging in many of these activities together. Although these young people may be victimizing others, they also are likely to be victimized by some of their peers. In fact, almost one third of respondents indicated that it was a friend or an acquaintance who hurt them the worst in terms of both physical and sexual victimization. Since many of these adolescents report affiliating with deviant peers and being victimized by deviant peers, it follows that these young people are likely to experience sexual victimization at the hands of a friend or someone they know when engaging in deviant subsistence strategies.

Engaging in survival sex also was found to be associated with friend sexual victimization. Although research on sexual victimization among runaways does not differentiate between different perpetrators as we have done here, studies have found that those who engage in survival sex are likely to experience either physical and/or sexual victimization at the hands of customers and/or pimps (Weisberg, 1985). Many of the Seattle respondents (26%) reported having friends who traded sex. Since some of the young people in the current study also report participating in this activity and are likely to do so with

deviant peers, it is possible that they are at increased risk for friend sexual victimization. Research also demonstrates that many runaways engage in survival sex as a last resort; they are hungry and need shelter (Silbert & Pines, 1982). Following this, it is possible that some of these youth, especially females, are being coerced into sex. Although females may be joining "street families" for safety (Hagan & McCarthy, 1997) this does not preclude them from experiencing victimization from within the group. Since many of these young people are dependent upon the group for their safety and survival, they may become victims of coercive sex by some of the group members.

In terms of the choice components, gender was found to be a very strong predictor of friend sexual victimization. As alluded to above, when females are without a stable residence and are dependent upon a group of deviant peers for their protection, they are likely to have little power and control in terms of their situation. Having little control may result in their being at risk for coercive and even forced sexual intercourse. Many of these young women are desperate for food and a place to stay and hanging out with deviant peers may be their only assurance of receiving such necessities. As such, females are likely to be at increased risk for friend sexual victimization.

Grooming also was found to be associated with friend sexual victimization such that those who had clean physical appearances were more likely to be at risk. Although the literature in this area among homeless adolescents is virtually non-existent, it seems logical that youths who are well-groomed may be more likely to be chosen as potential victims. Since some research on homeless adults tends to find that homeless women do their best to look attractive and to look like women who are not homeless for a variety of reasons (Russell, 1991), it is possible that the young women in this study are no different. That is,

being clean and well-groomed may be an important factor in terms of how these young women define themselves. If grooming is congruent with the needs of their deviant peers, then it is likely that those adolescents who are well-groomed, both male and female, are more likely to be at risk for friend sexual victimization.

A comparison of nested models for friend sexual victimization revealed that there was a significant improvement in model fit over the baseline model when adding the exposure items. This finding suggests that the exposure items, which included hard drugs, deviant subsistence strategies, and survival sex, are important for understanding the victimization process over and above including only the proximity items.

Adding the choice components to the proximity and exposure items also revealed a significant improvement in model fit. This suggests that although being out on the street and engaging in dangerous activities may put these young people at risk, clearly the motives of the offender is also an important component in understanding the victimization process.

The combination of exposure and the offender's needs were found to increase the risk for friend sexual victimization. That is, the interaction term gender \times deviant subsistence strategies revealed that the effects of deviant subsistence strategies on friend sexual victimization varied by gender. A test of the individual slopes revealed that for females, the likelihood of being sexually victimized by a friend increased as did their participation in deviant subsistence strategies. In contrast, males did not experience an increase in friend sexual victimization even as their participation in deviant subsistence strategies increased. Females also were likely to experience higher rates of victimization by a friend compared to their male counterparts. This finding suggests that it is the combination of participating in

deviant behaviors and being female that is likely to increase the risk for friend sexual victimization.

The interaction term age \times deviant subsistence strategies was significantly associated with friend sexual victimization. This finding suggests that the effects of deviant subsistence strategies on friend sexual victimization varied by age. Nineteen-year-olds experienced higher rates of friend sexual victimization compared to the two younger age groups when deviant subsistence strategies were at a minimum. It is possible that the 19-year-olds have been on the street for a greater length of time and therefore have been at risk for a longer time period. In contrast, the youngest respondents may have been on the street for a very short time and therefore have not become part of a street family or affiliated with deviant peers. This may result in a decreased risk for a brief time period. The interaction also revealed that all of the respondents, regardless of age, experienced higher rates of friend sexual victimization when engaging in higher rates of deviant subsistence strategies. Younger respondents may become more involved with deviant peers and deviant subsistence strategies as their time on the street increases. This is likely to result in an increased risk for friend sexual victimization.

Theoretical Implications

Overall, the current models of sexual victimization tend to provide support for structural-choice theory (Meithe & Meier, 1990) among a sample of runaway and homeless youths. The first proposition of structural-choice theory, which held that the daily routines and lifestyles of individuals create a structure of criminal opportunity by enhancing contact between potential offenders and potential victims, was supported in the current study. Runaway and homeless youths who run from home at an early age and run away numerous

times are likely to spend more time out on the streets which increases their contact with potential offenders. Sleeping on the streets also is likely to increase the contact between offender and victim. Being out on the streets decreases the physical distance between the areas where potential offenders are likely to be found and where potential targets of crime are likely to reside (Cohen et al., 1981). Spending time on the street puts these young people in close proximity to potential offenders and this is likely to increase their chances of sexual victimization. The three proximity items did not appear to be particularly important in terms of explaining total sexual victimization or friend sexual victimization. However, these items were important in determining stranger sexual victimization. This finding suggests that the importance of proximity may vary depending on the perpetrator. In terms of stranger sexual victimization, it appears that the proximity items are important for explaining the potential for criminal opportunities and therefore for increased victimization (Hindelang et al., 1978; Cohen & Felson, 1979).

The first proposition of structural-choice theory also argues that individuals can experience differential exposure to crime depending on their participation in a particular lifestyle or daily routine. Engaging in a lifestyle that exposes the person to dangerous places and people increases the potential for crime opportunities and therefore for increased victimization (Meithe & Meier, 1990). Young people in the current study were exposed to crime through a variety of means. First, runaways spend a large portion of their time in public places, especially at night and this increases their exposure to crime. Second, engaging in deviant behaviors such as drug use, deviant subsistence strategies, and survival sex, increases these young people's visibility and accessibility to potential offenders (Cohen et al., 1981) thus resulting in an increased risk for sexual victimization. Overall, the current study

provides strong support for the importance of exposure to crime in predicting the likelihood of sexual victimization.

The second proposition of structural-choice theory holds that the subjective value of the potential target and the level of guardianship determine which targets are ultimately selected (Miethe & Meier, 1994). This suggests that whether or not individuals become victims depend on their subjective utility compared to other targets (Miethe & Meier, 1994). In other words, becoming a victim is not only based on a particular lifestyle as indicated in the first proposition, but is determined by the particular motives of the offender. Persons are selected by the offender because they are seen as having particular value (Meithe & Meier, 1990). Similarly as Finkelhor and Asdigian (1996) argue, a particular target is selected because he/she is seen as having characteristics that are congruent with the needs of the offender. As such, targets are selected not on the basis of anything they do but rather because they are seen as having certain characteristics that are considered of value by the offender. The current study finds strong support for this proposition. That is, regardless of the model considered, age, gender, and grooming all were important predictors of sexual victimization. Since the outcome variable in the current study is sexual victimization, it follows that gender and grooming are particularly important since these are seen as characteristics that are congruent with the needs of a sexual offender (Finkelhor & Asdigian, 1996).

The second proposition of structural-choice theory also holds that the level of guardianship is important for determining which targets are ultimately selected (Miethe & Meier, 1994). Level of guardianship is defined as the ability of persons or objects to prevent violations for occurring (Cohen et al., 1981). In other words, individuals who have high levels of guardianship increase the “costs” for the would-be offender, thus decreasing the

opportunity for victimization (Miethe & Meier, 1994). Since guardianship includes social dimensions, such as number of friends, it was hypothesized that peers would protect these young people from experiencing sexual victimization. Contrary to what was expected however, no support was found for this hypothesis in any of the models.

One possible explanation for why deviant peers was not associated with sexual victimization is that it is difficult to look at deviant peers separate from deviant subsistence strategies since the two are so closely related. That is, the literature demonstrates that affiliating with deviant peers leads to participation in deviant subsistence strategies (c.f. Hagan & McCarthy, 1997; Lauritsen et al., 1991; Whitbeck & Simons, 1990; Whitbeck et al., 1997, in press). Due to the context of street life, which requires surviving in a hostile and exploitative street environment, homeless and runaway youth tend to become associated with other street youth who engage in deviant behaviors. Affiliating with peers who are engaging in deviant and dangerous behaviors (e.g., selling drugs and conning) is likely to expose these young people to potential offenders and put them at risk for various forms of victimization. That is, if their deviant peers are engaging in such behaviors, it is not likely that they are protecting these street youth from increasing victimization. Furthermore, since these young people are engaging in deviant subsistence strategies along with their deviant peers, it is possible that not only are their deviant peers not protecting them from potential offenders but the deviant peers themselves may be doing some of the victimizing. Based on this, deviant peers are not likely to provide much support in the way of capable guardianship for these street youth.

In terms of capable guardianship, it is important to recognize that homeless and runaway youth have very few resources available that would help them prevent violations

from occurring. For example, in the general population, one could reduce the likelihood of being victimized by moving away from high crime areas or by installing a burglar alarm. For the young people in this sample, however, these are not realistic options for increasing guardianship. Another possible way to increase guardianship is to refrain from participating in deviant subsistence strategies. The problem with this however is that runaway and homeless youth are dependent on such strategies for their very survival so this too does not appear to be a realistic option for these young people. Finally, joining a “street family” may be another way to increase guardianship. However, as indicated above, this does not appear to be a successful solution by any means since many of their peers are engaging in deviant behaviors which increases these young people’s exposure to potential offenders and therefore increased victimization.

Since guardianship is defined as the ability to prevent crimes or violations from occurring (Cohen et al., 1981), homeless and runaway youth who spend the majority of their time out on the streets especially at night, are likely to have limited options when it comes to providing capable guardianship. As such, all of these young people are likely to have low levels of guardianship. The guardianship that these young people may have available, such as their peers, is not a good guarantee of protection. Due to the nature of the sample, it seems difficult at best to assess the extent of capable guardianship.

Overview

Structural-choice theory is an improvement over previous theories of victimization because it takes into account both the lifestyles of the individuals and the motives of the offender. Based on the current study, it appears that living in certain environments does increase one’s exposure to dangerous situations but whether or not an individual becomes a

victim depends on his/her subjective utility compared to other targets (Miethe & Meier, 1994). That is, engaging in deviant behaviors alone did not necessarily lead to increasing victimization. However, when the needs of the offender were taken into account, the deviant behaviors became important. This suggests that it is not only the daily routines and lifestyles of these young people that put them at risk for sexual victimization but the needs of the offender are also important for explaining this process.

In terms of the overall utility of this theory, the concepts of exposure and target congruence were found to be particularly important in predicting the likelihood of sexual victimization among a sample of homeless and runaway youth. Although the proximity items did provide some support for this theory, it was found that proximity was more important for predicting stranger sexual victimization as opposed to friend or total sexual victimization. Finally, the current study did not find any support for the concept of capable guardianship. Due to the nature of the sample, capable guardianship does not appear to be particularly useful given the environment in which these youth exist. That is, these young people have few resources available when it comes to preventing violations from occurring due to the nature of their circumstances which includes surviving on a day-to-day basis out on the street. Since many homeless youth have low guardianship and offenders are more likely to choose targets that are less well-guarded (Cohen et al., 1981), then this does not appear to be a particularly useful concept in determining the differential risk for sexual victimization. Rather, all youth appear to be at risk to at least some extent because they all have low levels of guardianship. It follows that since there is little variability among homeless youth in terms of guardianship, offenders are likely to look for other characteristics in the youth that they find particularly congruent with their needs.

In summary, structural-choice theory (Miethe & Meier, 1990) is useful in explaining sexual victimization among a sample of homeless and runaway youth. However, since such theories were designed originally to explain stereotypical crime among the general population, some modifications to these theories are needed. For example, since runaway youth spend the majority of their time out on the street and have limited resources, little variability exists in terms of proximity and guardianship. However, the exposure and target congruence items proved to be particularly useful in explaining sexual victimization. Furthermore, the combination of these variables provided further insight into the victimization process. Based on the current findings, it appears that the likelihood of being sexually victimized is a complicated process but structural-choice theory is a good place to start in terms of untangling some of the nuances of the victimization process among homeless and runaway youth.

Limitations

One limitation of the current study is the problem that exists in measuring the four central concepts of victimization theories. The definitions of these concepts are vague and overlap with one another thereby making it difficult to get accurate measures of the indicators. For example, the concepts of exposure and proximity can be used interchangeably. Exposure is defined as the individual's visibility and accessibility to potential offenders (Cohen et al., 1981) and was measured in terms of engaging in deviant behaviors in the current study. However, based on the above definition, exposure could have been measured by the amount of time the individual spent on the street or the age at first run. In the current study, however, street time and age at first run were used to measure

proximity. It is possible that grouping street time and age at first run under the exposure items may have given us different results.

Another problem that exists is that much of the literature relies on secondary data sources which has resulted in depending upon proxy measures of the key theoretical concepts (Miethe & Meier, 1994). Likewise there is wide variability in how studies measure key concepts. For example, Miethe and Meier (1990) measure exposure to crime by nighttime activity rate whereas others have focused on community violence (Finkelhor & Asdigian, 1996) and going for a walk and attending sporting events (Kennedy & Forde, 1990). This lack of consensus in the literature has resulted in little theoretical support for victimization theories. The fact that we did not find support for the concept of capable guardianship in the current study may have been a result of how it was measured. However, other research that has focused on homeless youth also reveals the difficulty in measuring this construct and found least support for the guardianship hypothesis (Hoyt et al., in press).

Future Research

Future research in this area should replicate this study using the same measures which would help to determine whether they are accurate indicators of the key theoretical concepts in question or whether the support provided was unique only to this sample. The current study had little to go on in terms of measuring these concepts due to the lack of consensus in the literature. Since the definitions tend to be vague and ambiguous, it is likely that others will experience similar problems in trying to measure the central concepts of victimization theories. One way to get accurate measures of the key theoretical concepts is through replication of previous research. When the findings do not provide support for these concepts

over and over again, perhaps it is time to discard them and work at re-conceptualizing these theories.

Looking back, it would be helpful to include measures of resiliency in future analyses as possible indicators of capable guardianship. For example, having a job, which is a measure of resiliency, may decrease the likelihood of victimization because working removes the young person from the street thereby decreasing risk, especially if the job includes night work. In addition, although we looked at deviant peers as possible protectors, it would have been useful to include some information on network support. That is, what types of support are their friends currently supplying and does this help to buffer them from victimization.

Although the focus of the current analyses was not on multiple victimization, it would be interesting to look at whether the same person was doing the victimizing. Although we do have data on the number of people who have sexually victimized these young people since they have been on their own, we do not know who the perpetrator is, only the person who did these things most often or hurt them the worst. As such, the current study distinguished between whether the perpetrator was a friend or a stranger. If data permitted, it would have been interesting to test whether the friend they listed as perpetrator was a close friend of theirs. In other words, was it a deviant peer with whom they associate with and engage in deviant subsistence strategies on a regular basis.

Summary

This study focused on the effects of a high-risk environment on the sexual victimization of homeless and runaway youth. Many of these young people have suffered from early childhood sexual abuse and have experienced various forms of sexual victimization at the hands of both strangers and/or friends while out on the street. Runaway

and homeless youth who have engaged in risky, deviant behaviors and who have spent a lot of time out on the street were likely to have experienced higher rates of sexual victimization. Young people who possessed certain characteristics that were seen as congruent with the needs of the sexual offender also were more likely to be victims of sexual assault. This study found support for the structural-choice theory of victimization (Miethe & Meier, 1990) such that the combination of the social environment (i.e., proximity and exposure) and the motives of the offender (i.e., target congruence) resulted in an increased risk for sexual victimization among these homeless and runaway youth.

Young people who leave dysfunctional and disorganized families to escape the abuse often find themselves faced with similar problems once they enter the street environment. Plagued by financial problems, such as lack of food and shelter, these youth become vulnerable to the dangers of survival in an often hostile and exploitative environment. Being out on the street and engaging in deviant and risky behaviors puts these young people in close proximity to potential offenders, exposing them to crime and criminals which increases risk. However, whether or not they become victims depends upon the particular motives of the offender. Existing in such a high-risk environment increases these young people's chances of being re-victimized time and time again.

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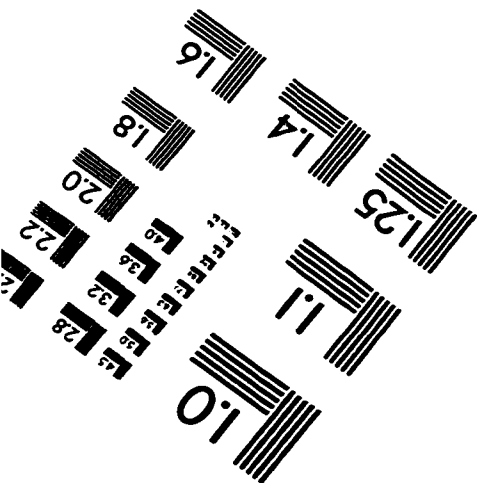
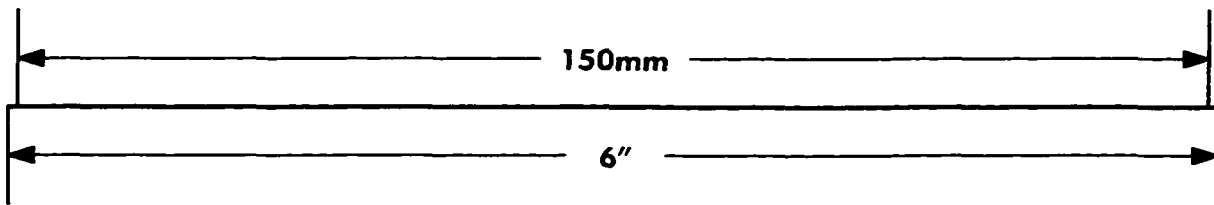
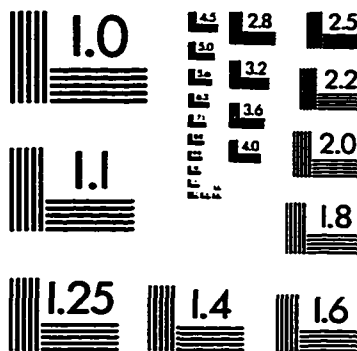
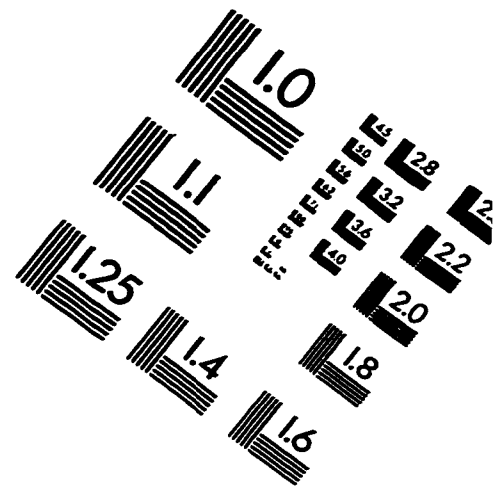
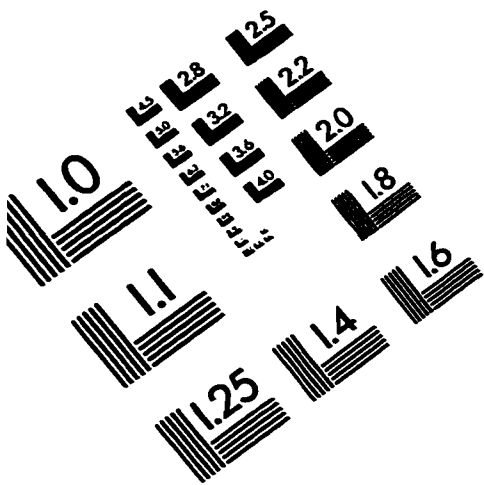
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IMAGE EVALUATION TEST TARGET (QA-3)



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